

CONTRACTING FOR A & E SERVICES

INSTRUCTOR GUIDE

FEDERAL ACQUISITION INSTITUTE
CURRICULUM OF PROCUREMENT
TRAINING COURSES
CURRENT THROUGH
FAC 90-37

**OFFICE OF ACQUISITION POLICY
GENERAL SERVICES ADMINISTRATION**

APPROACH TO THE COURSE

Length:	One week (5 days).
Who Should Attend:	Contract Specialists in GS 1102-9 to GS 1102-11 positions.

PREPARING TO TEACH *Contracting for A-E Services*

To teach this version of *Contracting for A-E Services*, for the first time, you should plan 40 to 80 hours of preparation. You will not need this time to research and build your own detailed lecture notes, case studies, role-plays, or the like. This Instructor's Guide is complete with all the instructional materials necessary to deliver the course. Rather, you will need the time to become thoroughly familiar with the Text/Reference and this Instructor's Guide.

You may want to include annotations or build your own additional examples for teaching points.

Draw on any supplementary materials available to you. For example, bring a copy of the Brooks Act for the class to peruse.

Review the attendance roster prior to class to evaluate the makeup of the group (i.e., organization unit, grade level, etc.). Continue to evaluate for experience and ability level throughout the course. Use this information to form study/work groups as needed.

Arrange for the necessary training aids:

- Viewgraphs and overhead projector.
- Flipchart and markers (enough for the groups to use all week).
- Chalk for the chalkboard.

Examine the classroom before the students arrive, preferably no later than the day before. Make certain there is a table upon which you can place all your materials. Make sure the location of your table and/or podium is visible by all students. Make certain there is sufficient room for you to move easily among the several tables to assist individuals as needed. If possible, set up table in middle of room for role-plays and negotiation sessions

TIPS ON CONDUCTING THE COURSE

Time management is critical. Stick to the schedule. Move the class along. If questions are asked on Monday that pertain to topics to be covered on Tuesday, defer answering the questions until Tuesday.

At the end of each day, remind the students of their reading assignments for the night. As indicated in the text, punctuate lectures with questions that the students should be able to answer from the previous night's reading.

Remember to get the completed course evaluation form from all students.

INSTRUCTIONAL METHODS

Since the principal purpose of the course is to teach skills, lecture is de-emphasized with more reliance given to:

- Case Studies
- Individual and Group Exercise
- Role-Plays
- Class Discussion

When groups are working on case studies, visit each group to answer questions or emphasize certain aspects of the exercise. Do not read newspaper or otherwise be distracted during exercises. Read ahead to be prepared for next material in IG.

EVALUATING YOUR PERFORMANCE

The following are among the criteria for evaluating your performance:

- Accomplishment of the learning objectives.
- Coverage of all teaching points, case studies, group exercises, and role-plays.
- Effectiveness in presenting the lectures, group exercises, case studies, role-plays, and discussions.
- Use of all Classroom Exercises provided to the students.
- From time to time this course will be monitored for adherence to this IG.

FORMAT OF THE INSTRUCTOR GUIDE

① TOPIC: TECHNICAL EVALUATION

② **Ref.:** Chapter 3, Pages 3-5 to 3-18

③ **Objective:** When you complete this lesson, your students should be able to:

- Research factors used for comparable procurements.
- Determine whether award will be based on “lowest price” or “greatest value.”
- Critique factors for determining acceptability.
- Obtain agreement on the factors.
- Incorporate factors in the solicitation.

④ **Time:** Monday 3:35 - 4:00

⑤ **Method:** Lecture/Individual, Class and Group Exercises

Lesson Plan

Ref.



TR 3-5
to 3-6

⑥



⑦ Steps In Presenting The Topic

3.1.1 Research Technical Evaluation Factors. ⑨

⑩ **Tell** the class that market research plays an important role concerning evaluation factors.

• Question:

In what way can market research assist in determining evaluation factors?

Answer: Market research can help identify evaluation factors that are typically used in similar procurements.

Instructors Notes

⑧

KEY TO FORMAT

- ❶ Each lesson begins with a topic. Most chapters address more than one topic.
- ❷ The Ref. (i.e., reference) is to the corresponding chapter or pages from the text/reference for the topic.
- ❸ This identifies learning objective(s) related to the topic.
- ❹ This identifies the starting time for coverage of the topic (i.e., 3:35 - 4:00).
- ❺ This is the method of instructing this lesson. Other methods include role-play, case study, class and group exercises.
- ❻ This column provides occasional references to pages from the Text Reference (TR 3-5 to 3-6) and from the Classroom Exercise Book (CE 3-5). Note that the Classroom Exercise Book has been incorporated into this Instructor Guide—as the instructor, you will therefore only have to work with the Instructor's Guide and the Text/Reference.

This column also contains icons or visual queues to the method of instruction (see following page for a catalog of icons and the definition of each).
- ❼ This column presents the teaching points, information to support the teaching points, and transitions.
- ❽ This column for the most part is blank. Please feel free to add your own personal notes to your copy of the Instructor's Guide.
- ❾ This is a teaching point. You are responsible for covering all such points.
- ❿ This information supports the teaching point. We have tried to provide all the information necessary for each teaching point, so that you will not have to do additional research to teach Contracting for A-E Services. However, you should try to convey this information in your own words. More importantly, we strongly encourage you to weave in your own examples and draw on your own experience in presenting the teaching point.

ICONS

The Icons used in this instructor guide are shown below:



Show view graph



Show interactive view graph



Instructor note of special significance



Role-play



Use chalkboard/flipchart



Group Exercise



Question/Answer sessions



Case Study



Text Reference

TOPIC: INTRODUCTION TO CONTRACTING FOR A-E SERVICES

Reference: Introduction, Classroom Exercise Book

Objective: When you finish this lesson, your students should be able to:

- Establish working groups.
- Be familiar with the course materials.
- Identify how the “*Contracting for A-E Services*” course is organized.

Time: 8:00 - 9:00

Method: Lecture/Group Exercise

Lesson Plan

Ref.	Steps In Presenting The Topic	Instructors Notes
	<p>a. Class Introduction.</p> <p><u>Assign</u> Introduction to Text / Reference. (This should be done while the students are arriving.)</p> <p><u>Ask</u> Students to fill out their name plates as they arrive with their first name only and agency acronym.</p> <p><u>Write</u> on the chalkboard what information you want the students to provide about themselves.</p> <ul style="list-style-type: none"> • Name. • Office. • Title. • Reasons for attending this course. • How long you have been in your career field. • What other procurement courses you have taken. • How do you think this course will help you perform your job. 	<p>Be sure to individually greet each student and tell each student to immediately read the Introduction to the Text / Reference.</p> <p>At 8:00 tell students to stop reading.</p>



b. Start the course by saying:

Good Morning, my name is

_____ and I am the
instructor for the “*Contracting for A-E
Services*” Course.

**c. Verify this is the Correct
Class.**

Ask "Is everyone in the right course?"

**d. Tell the Students About
Yourself.**

Provide background.

**e. Have Students Introduce
Themselves.**

Ask each student to stand and address the
class.

Assign students to working groups for the
week. Try to balance groups based on
experience, agency representation, and
personalities you observe during
introductions.

Number of groups

**This is dependent upon
the number of students in
the class. It is
recommended you have 4
or 5 team members for
each group.**

f. Discuss the Course.

Explain to the class that there will be
individual, group, and class exercises. The
best way to teach contract specialists is to
actually perform tasks in lieu of listening to
someone talk about them.

TR and
CE



Caution the students that in order for them to get the most out of this course, they should:

- read their assignments,
- participate in class, and generally,
- have a good time learning.

g. Discuss Course Materials.

Explain to the class that they have been given **two** books, they are

- Text / Reference (TR)
- Classroom Exercise Book (CE)

Tell the class to bring **both** books everyday.

Explain that the Text Reference (TR) consists of **5 chapters** and related appendices.

Direct the students attention to the Table of Contents. Have the students take a look at the chapters that will be covered. Explain to them that this course covers contract specialist tasks unique to contracting for A-E services. Everyone in the class should have completed basic courses in contracting as these basic contracting tasks will not be re-taught.

CE



Advise the students that they are responsible for reading all the chapters and that reading assignments will be given as homework.

This book is intended to be used in this classroom and also as a desk reference on the job.

Explain that the Classroom Exercise Book consists of all the materials needed to do the exercises.

Explain that the **Classroom Exercise Book** contains:

- Case Studies
- Exercises
- Scenarios
- View Graphs

Explain to the class that some exercises will require you to work individually and others will require group work. During the group exercise, one member of the group will present its response to the class using the flip chart pages provided.

Explain that the course will use a case study based on a cafeteria design procurement throughout the week. Some of these exercises build upon one another.

Ask the class to inform you if you fail to tell them which book they should be using. (Book covers may be printed in different colors.)

h. Discuss Administrative Details.

Explain the whereabouts of the restrooms, eating spots, beverage places (or call on students who are familiar with the area).

State:

- Class is from **8 a.m. to 4:30 p.m.**
- You will be given two (2) fifteen minute breaks--one in the morning and one in the afternoon and one hour for lunch.

i. Seat the New Groups.

Students are to move to their new groups for the entire week. If they complain about not being able to sit with their friends, **state: "diverse groups are the best groups to have."**



CE I-2
to I-7

j. Assign "Team Dynamics Exercise."

Inform the class to read the Team Dynamics Exercise in the introduction to the Classroom Exercise Book and to provide the needed information.

Allow 10 minutes for this exercise.

Ask if everyone is ready. If not, give them 5 more minutes.

Walk from group to group and answer questions the individual groups may have.

Case Study I-1

"Group Dynamics"

The objective of this exercise is to establish ground rules and operating procedures to be followed by your group.

Directions: Part I. Assign roles to group members and name your group.

Identify a facilitator_____

The facilitator acts as the group leader and is responsible for keeping the group focused on the objective.

Identify a recorder_____

The recorder keeps the group's notes and is responsible for preparing the group's written assignment when required.

Identify a time keeper _____

The time keeper is responsible for the time being spent by the group.

Identify a spokesperson for each day of the week:

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

The spokesperson responds for the group and makes presentations.

Give your group a one word name: _____

1. Summarize Case Study “Group Dynamics.”

Lead the class in a discussion. Ask the following questions.

- Are all the members of your team satisfied with the ground rules and operating procedures?
- Let's take a look at your group names and your lists. Solicit discussion.

Tell students that making presentations is a very important skill to acquire to be an effective contract specialist.

NOTE: To facilitate presentations, each group should have use of a flip chart to prepare presentations.

2. Tell Students to Read Letter in Introduction of CE Book.

Dear Student:

This week, you will receive training as a Contract Specialist, GS-1102, in A-E contracting procedures. You will be involved in a hypothetical procurement for a cafeteria design.

You will perform the following contracting for A-E services duties and tasks to procure a cafeteria design.

1. Select methodology for acquiring A-E services.
2. Forecast A-E requirements.
3. Determine if Brooks Act applies.
4. Conduct market research for qualified A-E firms.
5. Develop A-E acquisition plan.
6. Develop synopsis scope of work.
7. Review SF 254s and 255s.
8. Prepare selection report.
9. Prepare RFP using SF 252 and A-E specific clauses.
10. Evaluate A-E proposal.
11. Administer A-E contract .
12. Determine 6% fee limitation after change order.
13. Evaluate Performance Evaluation SF 1421.

At the completion of this course, you will be given a closed book exam. The exam will contain multiple choice and true/false questions. The test questions are derived from the Text Reference learning objectives which appear on page 2 of each chapter of the Text / Reference. Performing the classroom exercises will help you understand the materials in the Text / Reference and prepare you for the test. You should not assume you can pass the test without participating in class and completing the reading assignments. Certificates will be provided to students who have attended class, participated in the class exercises, and passed the closed book exam.

<p><u>Give</u> the students an opportunity to scan the letter.</p>
<p><u>Tell</u> the students to look at and review the Course Agenda.</p>
<p><u>Allow</u> students an opportunity to ask any questions they may have about the course, the materials, etc.</p>

End Of Introduction, Begin Lesson 1.

LESSON PLAN

A-E PROCEDURES

CHAPTER 1

TIME	LESSON	OBJECTIVES
8:00 - 9:00	Introduction to Course	
9:00 - 9:30	1.0 Introduction to A-E Procedures	
9:30 - 9:50	B R E A K	
9:50 - 10:30	1.1 Review of Government Procurement Procedures	<p>Describe difference between contracting for regular services and A-E services.</p> <p>Describe basic premise of Government procurement.</p> <ul style="list-style-type: none"> • Minimum need. • Maximum competition. • Open market.
10:30 - 11:30	1.2 Procurement of Professional Services	<p>Describe basic premise of contracting for Professional services.</p> <ul style="list-style-type: none"> • Professionals selected for judgment and expertise. • Price not a consideration in the selection process. • The traditional method. • Other methods.
11:30 - 12:30	L U N C H	
12:30 - 1:25	1.2 (Continued)	
1:25 - 3:00	Exercise 1.2 & BREAK	
3:00 - 3:15	1.3 Legislative History of the Brooks Act	<ul style="list-style-type: none"> • Public Works Act of 1939. • Federal Property and Administrative Services Act of 1949. • Brooks Act of 1972.
3:15 - 3:30	1.4 Forecasting Requirements for A-E Services	
3:30 - 4:30	Questions & Reading	

LESSON PLAN
A-E PROCEDURES

LESSON TOPIC GUIDE

FEDERAL ACQUISITION INSTITUTE

TOPIC: 1.0 A-E PROCEDURES

Ref: Text/Reference Pages 1-1 through 1-4


Objective: Describe the process as a whole:

- How it evolved.
- Differences from other types of contracting.
- Legislative history.
- Methods.
- Forecasting.

Time: 9:00 - 9:30
9:30 - 9:50 Break

Method: Group Interaction, Flowchart

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Overview and Objectives of Chapter 1</p> <p>Tell the students that in the first lesson we will take a look at the <u>process as a whole</u> and how it developed through a series of laws. How it differs from other forms of contracting and how requirements are forecasted early in the acquisition cycle.</p> <p>The overall objective:</p> <p style="padding-left: 40px;">To describe the events and Legislative history leading up to our current procedures, and how they are applied today.</p>	
	<p>Interject a Motivating Statement.</p> <p>By telling a <u>short story</u>, experience, or joke. Inform them that knowledge of the procedures used in A-E contracting are different and interesting and the "hands-on" experience they will receive in class will greatly enhance their ability to perform the tasks with a sense of professionalism and confidence.</p>	



T/R 1-4

LET'S GET STARTED!

To start with, lead the students through the flowchart on page 1-4 of their Text/Reference, briefly explaining each step in the flowchart.

Explain how each chapter presents one lesson and will contain a flowchart at the beginning, as well as a short vignette which will present some questions which will be answered during the lesson presentation, or at the end of each chapter.

Indicate the day in which the material will be presented.

(See Page IG 1-5 for copy of flowchart)

Presentation

Tell the students to turn to the vignette on page 1-1 at the beginning of Chapter 1.

While the students are reading, record the questions presented at the conclusion of the vignette, on the chalkboard.

Explain that answers to the questions will be presented at the close of the lesson.

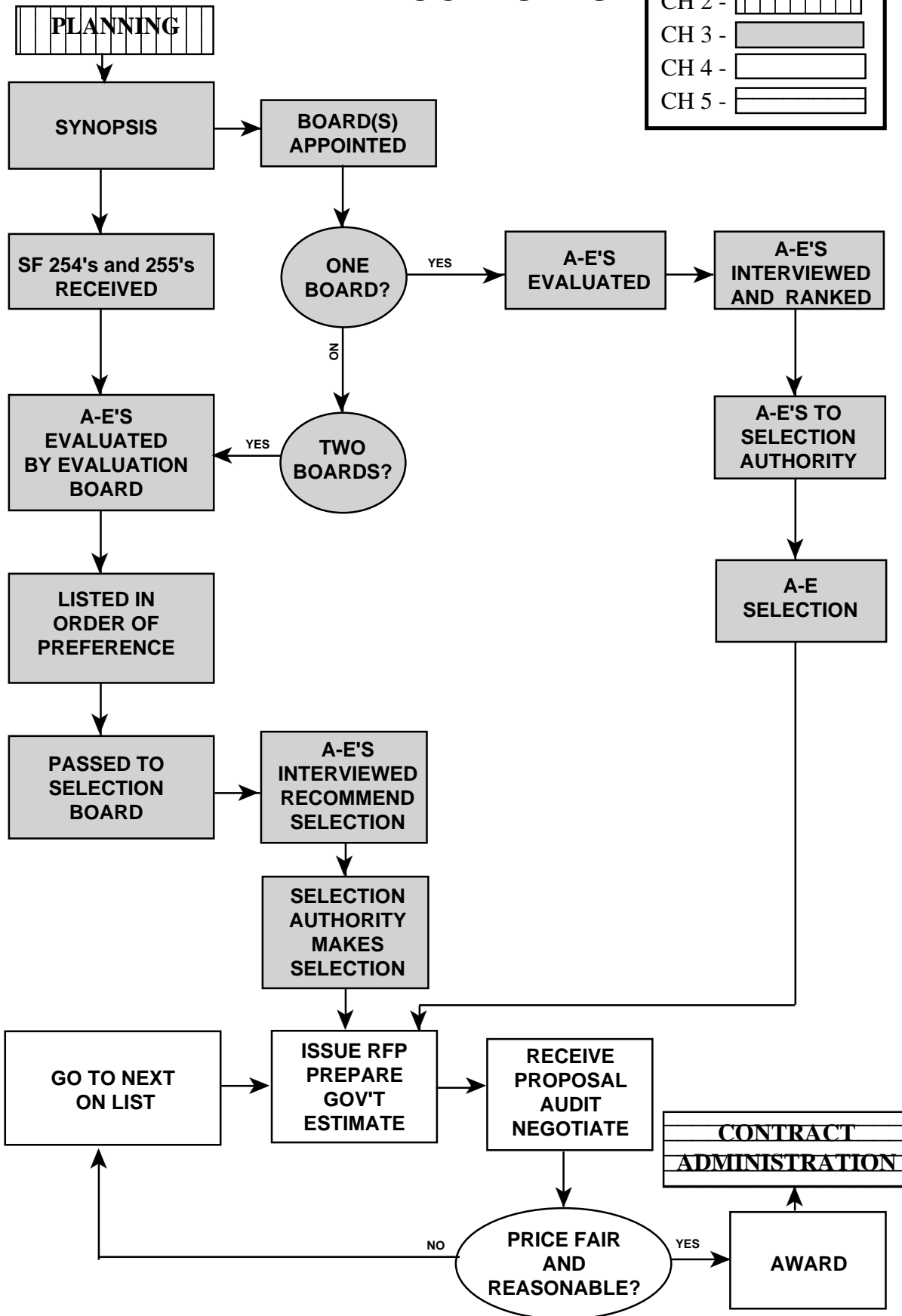
What is different about contracting for A-E services?

How has A-E emerged as a profession?

Do you agree with Jim's outlook?

A-E PROCEDURES

CH 2 -	
CH 3 -	
CH 4 -	
CH 5 -	



TOPIC: 1.1 REVIEW OF GOVERNMENT PROCUREMENT PROCEDURES



Ref: Text/Reference Pages 1-5 through 1-7




Objective: Describe the difference between contracting for A-E and other types of contracts.
- Describe the basic premise of Government procurement.



Time: 9:50 - 10:30

Method: Classroom Lecture, Interactive discussion, Viewgraphs

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>In the following lesson we are going to <u>compare</u> A-E procurement procedures to standard procedures used in contracting for services.</p>	
	<p><u>Question :</u></p> <p>Begin the lesson by asking the following question:</p> <p>"What is the basic premise of Government contracting that applies to all contracts?" In other words, what is the common thread that should hold true in all contracting procedures?</p> <p><u>Answer:</u> (Write answers on the blackboard for emphasis.)</p> <ul style="list-style-type: none">• Only the minimum needs of the Government are called for,• Maximum competition must be obtained.• Through open markets	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question :</u> "Does the class believe that this premise holds true in A-E contracting?"</p> <p><u>Answer:</u> In A-E, contracting for the minimum need requirement is accomplished by providing the A-E with:</p> <ul style="list-style-type: none"> * The scope of work, and * Standards and guide specifications which prevent: <ul style="list-style-type: none"> ✓Duplication. ✓Non standard design. ✓Gold plating. <p>However, the A-E is selected <u>NOT</u> on the basis of minimum need. Instead, the selection of an A-E is based on excellence.</p> <p>Maximum competition is obtained by:</p> <ul style="list-style-type: none"> * Advertising in the CBD. * Competition based on qualifications rather than price. 	
  T/R 1-6	<p><u>Question :</u> There are many differences in contracting for A-E services from the standard supply, services or construction contract, otherwise we wouldn't be here to learn what makes them different. Ask the students if they can name some of those differences AND EXPLAIN THE DETAILS OF EACH ONE.</p> <p>Tell the students that they may refer to the Exhibit 1-1 found on page 1-6 of their Text/Reference.</p> <p>Allow students time to come up with answers on each one of the elements and discuss briefly. However, <u>do not allow discussions to bog down</u> by answering detailed questions on the subject matter, as the <u>material will all be covered more thoroughly as they progress through the lessons.</u></p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Note to the Instructor: Detailed information is provided on the following pages for the convenience of the instructor in guiding the discussion. But first, show viewgraph 1.1 entitled A-E v. Other Contracting.	TELL STUDENTS ALL VIEWGRAPHS APPEAR AT THE END OF EACH LESSON IN THE CLASSROOM EXERCISE BOOK
		

A-E v. OTHER CONTRACTING

- | | |
|--------------------|-----------------|
| 1. PUBLIC LAWS | 8. SOLICITATION |
| 2. WAGE RATES | 9. BONDS |
| 3. SOURCES | 10. PRICING |
| 4. SYNOPSIS | 11. SELECTION |
| 5. OFFER FORMS | 12. AWARD FORM |
| 6. EVALUATION | 13. WARRANTIES |
| 7. CONTR. METHOD | 14. TERMINATION |
| 15. RESPONSIBILITY | |

VG 1-1

INSTRUCTOR'S GUIDE FOR DISCUSSION

<i>PUBLIC LAWS</i>	
REGULAR CONTRACTS	A-E CONTRACTS
ARMED SERVICES PROCURE- MENT ACT	BROOKS ACT P. L. 92-582
FED. PROPERTY & ADMINIS- TRATIVE SERVICES ACT	
SERVICE CONTRACT ACT	
WALSH HEALEY ACT	
CONSTRUCTION: DAVIS BACON ACT	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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WAGE RATES		
REGULAR CONTRACTS		A-E CONTRACTS
SUPPLY:	WALSH HEALEY	NEGOTIATED
SERVICES:	SERV. CONTRACT ACT	
CONSTRUCTION:	DAVIS BACON	

REQUIRED SOURCES	
REGULAR CONTRACTS	A-E CONTRACTS
SMALL BUSINESSES	SMALL BUSINESSES
SDBs	8(a)s
8(a)s	EMERGING SMALL BUSINESSES
EMERGING SMALL BUSINESSES	
FED. SUPPLY SCHEDULE	<i>Small Bus. Classifications:</i>
UTILITIES (SOME)	-Construction (Group 15) 17.0
JEWELLED BEARINGS	-Dredging (Group 16) 13.5
FEDERAL PRISONS	-Construction (Special) 7.0
BLIND & SEVERELY HANDI- CAPPED	-A-E services 2.5

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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<i>SYNOPSIZING</i>	
REGULAR CONTRACTS	A-E CONTRACTS
PRESOLICITATION NOTICES ARE REQUIRED	NO PRESOLICITATION NOTICES REQUIRED
SYNOPSISIZE UNDER CODES (J), (M), (N), (Y), OR (Z)	SYNOPSIZED UNDER CODE C
PROVIDES SKETCHY INFORMATION	COMPLETE SCOPE & SELECTION CRITERIA PUBLISHED
MAGNITUDE NOT REVEALED EXCEPT IN CONSTRUCTION	DOLLAR MAGNITUDE IN CBD

<i>OFFER FORMS</i>	
REGULAR CONTRACTS	A-E CONTRACTS
SF 33: SOLICITATION, OFFER, AND AWARD	SF254: A-E & RELATED SERVICES QUESTIONNAIRE
SF 1442: SOLICITATION, OFFER, AND AWARD (CONSTRUCTION) FOR A SPECIAL PROJECT	SF255: A-E & RELATED SERVICES QUESTIONNAIRE

<i>EVALUATION FOR AWARD</i>	
REGULAR CONTRACTS	A-E CONTRACTS
EVALUATED BY CONTRACT SPECIALISTS or AD-HOC BOARDS	EVALUATED BY TECHNICAL EVALUATION BOARDS

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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<i>TYPES AND METHODS OF CONTRACTING</i>	
REGULAR CONTRACTS	A-E CONTRACTS
FIRM FIXED PRICE, SEALED BID NEGOTIATED LETTER COST REIMBURSEMENT INCENTIVE TWO STEP SEALED BID TIME AND MATERIALS MULTIYEAR INDEFINITE CONTRACTS - QUANTITY - DELIVERY CONTRACT MANAGEMENT SERVICES GSA SCHEDULE JOB ORDER CONTRACT SOURCE SELECTION REQUIREMENTS CONTRACT	NEGOTIATED - LETTER - COST REIMBURSEMENT - INCENTIVE - INDEFINITE QUANTITY CONTRACT MANAGEMENT <i>In issuing A-E Indefinite Quantity contracts, the requirements must be more definitive. Used for smaller projects with few disciplines.</i>

<i>SOLICITATIONS</i>	
REGULAR CONTRACTS	A-E CONTRACTS
SEALED BIDS (IFB) NEGOTIATED (RFP) IF UNSUCCESSFUL, CANCEL SOLICITATION	SOLICITATION NOT ISSUED UNTIL A-E SELECTED IF NEGOTIATIONS UNSUCCESSFUL, GO TO NEXT A-E ON LIST <i>Procedures for construction and A-E found in FAR Part 36. Others, Parts 13, 14 & 15.</i>

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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BONDING		
REGULAR CONTRACTS		A-E CONTRACTS
CONSTRUCTION:	YES	NO BONDING
SERVICE CONTRACTS	NO	<i>No requirement for bonding, liquidated damages ,or insurance in A- E contract.</i>
OTHER CONTRACTS	NO	

PRICING	
REGULAR CONTRACTS	A-E CONTRACTS
PRICE & OTHER FACTORS BEST VALUE COST COMPARISON COST & PRICING DATA SIMILAR PURCHASES GOVERNMENT ESTIMATE	COST & PRICING DATA DETAILED GOVERNMENT ESTIMATE ANALYSIS
NO STATUTORY LIMITATIONS EXCEPT COST REIMBURSEMENT	6% DESIGN FEE LIMITATION

SELECTION	
REGULAR CONTRACTS	A-E CONTRACTS
LOW RESPONSIVE, RESPONSIBLE BIDDER/ PROPOSER IN IFB, RFP.	SELECTION BASED ON QUALIFICATION & EXPERIENCE
SOURCE SELECTION	COMPETITION IN DESIGN
SOLE SOURCE NEGOTIATION	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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<i>AWARD FORM</i>	
REGULAR CONTRACTS	A-E CONTRACTS
SF33: SOLICITATION, OFFER, AND AWARD	SF252: A-E CONTRACT
SF1442: SOLICITATION, OFFER, AND AWARD (CONSTRUCTION)	
SF26: AWARD/CONTRACT	

<i>WARRANTY CLAUSES</i>	
REGULAR CONTRACTS	A-E CONTRACTS
WARRANTY OF CONSTRUCTION	DESIGN WITHIN FUND LIMIT
WARRANTY OF SERVICES	RESPONSIBILITY OF THE A-E
CERTIFICATE OF CONFORMANCE	

<i>TERMINATION</i>	
REGULAR CONTRACTS	A-E CONTRACTS
TERMINATION FOR CONVENIENCE	TERMINATION (FP A-E)
TERMINATION FOR DEFAULT	

<i>RESPONSIBILITY</i>	
REGULAR CONTRACTS	A-E CONTRACTS
BONDING (CONSTRUCTION)	PERFORMANCE EVALUATIONS (SF 1421)
PAST PERFORMANCE HISTORY	
REFERENCES	
FINANCIAL	FINANCIAL
PRE AWARD SURVEY	
DUNN AND BRADSTREET	PROFESSIONAL REPUTATION

TOPIC: 1.2 PROCUREMENT OF PROFESSIONAL SERVICES

Ref: Text/Reference Pages 1-7 through 1-19



Objective: Contracting for Professional Services


- Professionals selected for judgment and expertise.
- Price not a consideration.
- The traditional method.
- Other Methods

Time: 10:30 - 11:30
11:30 - 12:30 Lunch
12:30 - 1:25
1:25 - 3:00 Exercise 1.2 and Break

Method: Mini-Lecture, Interactive Discussion, Classroom Exercise, Viewgraphs

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>The term "architect-engineer" (A-E) is sometimes confusing because it seems to be describing two different professional disciplines. Though the two disciplines are different, the term A-E usually refers to firms who perform services possessing qualifications common to both. Therefore, in practice, the A-E may be commonly referred to by either term.</p>	
	<p><u>Question :</u> What does architect-engineer mean?</p> <p><u>Answer :</u> It seems to be describing two different people, with two different specialties. However, though the two disciplines (architect vice engineer) are different, the term "A-E" refers to firms who perform services, possessing qualifications common to both disciplines. Let's look at these two viewgraphs for further clarification.</p>	
	<p>Show Viewgraph 1-2, discussing the contents, then show Viewgraphs 1-3 and 1-4.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>In the beginning, somewhere, and at sometime, the need for A-E services is created by the need for a construction project. It may be a new facility or may be the result of an ongoing operational program to maintain or improve an existing facility. Then, the project must be funded. The budget for a project may be specified in a specific line item in the federal budget, or may be part of the budget for an existing facility.</p> <p>Once the need has been identified and funded, it is the responsibility of each Government agency to prepare a set of plans and specifications. The preparation of plans and specifications is a key element in all Government construction projects. In the past these were usually prepared by in-house personnel. Today, it is common practice for the Government to secure outside architectural/engineering services.</p>	

ARCHITECT

Plans, Design, & Organizes Services for Construction of Office Buildings, Factories, Residences.

- Consults with Government.
- Consults with Others (on site or financial analysis or feasibility studies.)
- Provides Info (on cost & building time).
- Provides Concept (sketches, drawings, or specifications).

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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ENGINEER

Term Applied to Persons who Possess:



- Educational Qualifications
- Work Experience
- Legal Certification (where required as established by engineering boards or schools, or licensing authorities.)

VG 1-3

ENGINEERING FUNCTION

- RESEARCH & DEVELOPMENT
- DESIGN
- PRODUCTION
- CONSULTING
- ADMINISTRATION & MANAGEMENT
- TECHNICAL WRITING
- TECHNICAL SERVICE

VG 1-4



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>Engineering, as a profession, was much slower to develop than architecture, although engineering as well as architecture can be traced back to ancient Egypt.</p> <p>As can be seen from the viewgraphs, both the architect and the engineer write specifications in the same manner. In fact, these two professions have a great deal in common. An architect works mostly on plans for buildings, while an engineer is involved with bridges, dams, sewage systems, etc. Likewise, engineers hire architects to create the aesthetic features of their work. It is not unusual to find that an architectural firm will employ more professional engineers than registered architects. Many firms have both architects and engineers as principals and refer to themselves as "architects and engineers."</p> <p>An architectural and engineering firm is made up of various departments, each responsible for a specific phase of the work. A small firm will perform the same functions as the larger firm, but will have more consultants.</p>	
	<p>Show Viewgraph 1-5 which illustrates the makeup of a typical A-E firm.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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TYPICAL A-E FIRM

- CLIENT RELATIONS PERSON
- PLANNERS
- CONTRACT ADMINISTRATOR
- DESIGNERS
- CIVIL ENGINEERS
- ARCHITECTURAL DRAFTERS
- ENGINEERS (STRUCTURAL, MECHANICAL, & ELECTRICAL)
- LANDSCAPE ARCHITECTS
- SPECIFICATION WRITER

VG 1-5

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p style="text-align: center;">Methods of Contracting</p> <p>There are numerous methods which can be used to obtain design services. The most popular method used is to select the A-E in the "traditional" manner using the Brooks Bill procedures, followed by issuing a separate contract which is for construction.</p> <p>The traditional method just described was first used in the 18th century and became institutionalized in the 19th century.</p>	
	<p><u>Question :</u> Are there other ways other than the traditional two contract method that we can contract for a projects completion?</p>	
	<p><u>Answer:</u> (Show Viewgraph 1-6) Yes.</p>	

CONTRACTING FOR A-E SERVICES

- *TRADITIONAL*
- **CONSTRUCTION MANAGEMENT.**
 - A-E and/or Construction Contractor
- DESIGN-BUILD or TURNKEY

VG 1-6

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
?	<p><u>Question :</u> Which one is best?</p> <p><u>Answer :</u> All have their advantages and disadvantages.</p>	
	<p><u>Question :</u> How do we go about making a decision?</p> <p><u>Answer :</u> By matching your requirement with the advantages and disadvantages of each. However, there are additional criteria utilized that may influence your decision.</p>	

METHOD SELECTION CRITERIA

- AGENCY POLICY
- URGENCY
- ADVANTAGES v. DISADVANTAGES
- EXISTING CONTRACTS (e.g. IQ)
- AVAILABILITY of FUNDS
- POLITICAL PRESSURES

VG 1-7

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p style="text-align: center;">TRADITIONAL APPROACH</p> <p>1. In the traditional method, the Government hires a design professional to design the project. Under the Brooks Act, this is considered a competitive negotiation.</p> <p>2. Once the design is at, or near, completion, the Government retains a contractor to construct the project according to the A-E's design. The construction contract is most often issued as a lump sum Invitation for Bid under formal advertising procedures.</p> <p style="padding-left: 40px;">It is a linear process, meaning that the process is accomplished in two separate phases, and one phase cannot begin until the other phase is finished. Therefore its very nature leads to long time periods to complete the project. This has lead to some criticism of the process.</p> <p>3. The construction contractor usually subcontracts part of the work to various trade subcontractors. During the course of construction, the Government, with the assistance of the design professional, monitors the work to determine if the contractor is complying with the plans and specifications.</p>	

TRADITIONAL

TWO CONTRACTS AWARDED

1. DESIGN
 - Contract A-E under Brooks Act
 - Government in-house
2. CONSTRUCTION
 - IFB or Negotiated Offers

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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TRADITIONAL

ADVANTAGES :

- Selection on Qualifications not Price
- Design Completed before Funding
- 2 Contracts Act as Check & Balance

DISADVANTAGES :

- A-E often lacks Estimating Expertise
- A-E not a Construction Expert
- Long Time Frame for Linear Process

VG 1-9



Tell the students:

The traditional way to obtain design and construction is not the only method to be considered. There are several other ways which are growing in popularity. Perhaps the most popular other way of letting A-E design contracts is

CONTRACT MANAGEMENT

Reasons for the popularity are alleged as follows:



Note: Instructor should encourage discussion here by soliciting pros and cons.



Instructor should write on a flipchart or blackboard the reasons:

- Better quality (?)
- More innovative and cost effective (?)
- Desire to avoid adversarial relationships (?)
- Desire for redistribution of risks. ? (i.e., can best control various aspects of the work.)
- Fewer delays and faster ways to complete the project (?)

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="188 390 272 470" data-label="Image"> </div> <div data-bbox="188 506 289 531">T/R 1-12</div> <div data-bbox="188 657 289 682">T/R 1-14</div>	<p data-bbox="331 254 1075 388">The Contract Management method is one that has enjoyed increased usage. However, it means many things to different people, and agencies treat the process differently.</p> <p data-bbox="380 426 1026 548">Ask one of the students to read the definition of CM as <u>GSA views it which is found on page 1-12 of the Text Reference</u>.</p> <p data-bbox="380 585 1026 795">After the reading of the GSA definition, ask the students to look at Exhibit 1-5 in their Text/Reference, found on page 1-14. (copy for the Instructor is provided on the following page.)</p> <p data-bbox="331 833 1075 1035">This exhibit lists many of the tasks which you may require the CM to perform. The Government tailors the requirement to the need by calling for the A-E to perform anywhere from one to all of the tasks listed. It's like looking at a menu at your favorite restaurant. You choose only what you need or what you want.</p> <div data-bbox="448 1094 954 1173" data-label="Section-Header"> <h3>ADDED INFORMATION FOR INSTRUCTOR</h3> </div> <p data-bbox="331 1253 1075 1417">A construction manager (CM) is a professional retained by the Government to interface with the design professional and trade construction contractors on various aspects of the work.</p> <p data-bbox="331 1463 1075 1673">Regardless of the extent of involvement in a project, there is a common thread running throughout the CM's duties; which is that the CM will be actively involved in reviewing the design for constructability and cost effectiveness.</p> <p data-bbox="331 1719 1075 1841">Value engineering efforts can result in a substantial savings in terms of both time and construction costs.</p>	

TYPICAL SERVICES WHICH MAY BE REQUIRED OF A CM

Design Phase	Preaward Phase	Construction Phase
<p>Submission of Management Plan (over \$1 million)</p> <ul style="list-style-type: none"> - scope - milestones for phases - budget for each phase - identification of consultants - organization chart - duties and authorities - estimate of man-hours <p>Provide office facilities. Recommend special qualification requirements. Assist in preparing CBD notice. Offer technical support during ranking of offers. Submission of progress reports. Brief successful A-E on project. Assist in preparing scope of project. Review cost proposals. Cost estimation of project. Cost evaluation. Project scheduling. Coordination of project documents. Design review. Review submittals. Perform constructability reviews. Advise A-E on availability of construction labor. Advise A-E on cost reducing alternatives. Advise A-E on defects, conflicts, discrepancies, or lack of clarification in documents. Monitor and analyze the building climate. Participate in meetings. Advise the Government of any and all problems. Review all proposals for changes.</p>	<p>Prepare and transmit CBD announcement. Prepare, assemble and submit to the Government the PIN notice. Prepare and submit to the Government the solicitation package. Perform marketing duties. Participate with the Government in prebid conferences. Review all bids, bidder qualifications, and provide recommendation of award.</p>	<p>Arrange and participate in preconstruction conference. Review and recommend approval of construction progress schedule. Monitor progress. Inspection and testing. Recommendations concerning rejection of materials & workmanship. Maintain daily logs. Review progress payment requests. Review all submittals. Monitor design clarifications. Maintain all files. Monitor costs. Monitor labor compliance. Monitor safety compliance. Provide spread sheets. Process correspondence and prepare replies for the contracting officer's signature. Advise the CO of all potential disputes. Testing services. Monitor Buy-American requirement Other one time services which may include:</p> <ul style="list-style-type: none"> - surveys - photographs - expert testimony in court.

Exhibit 1-5

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>During construction, the CM plays a major role in:</p> <ul style="list-style-type: none"> - Project scheduling. - Payment requisition review. - Change order analysis. 	

CONSTRUCTION MANAGEMENT

ADVANTAGES :

- Possesses Management Expertise.
- Prevents Inefficient Management.
- Relieves Govt. of Admin. Burden.
- Looks More Objectively at Design Ambiguities.
- May Deliver More Cost Effective Project.

VG 1-10

CONSTRUCTION MANAGEMENT




DISADVANTAGES:

- May be Lacking in Trained Personnel.
- Government May Lose Some Control.
- Less Reliance on Quality Control by Construction Contractor.
- Three Separate Entities to Deal with.

VG 1-11

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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<p style="text-align: center;">ADDITIONAL</p> <p style="text-align: center;">ADVANTAGES AND DISADVANTAGES OF THE CONTRACT MANAGEMENT CONTRACT</p>	
ADVANTAGES	DISADVANTAGES
<p>1. The CM contract is held out as a partial solution to the inability of the A-E to give clear and accurate estimates. The A-E is often thought to be uncomfortable giving early estimates, as estimating is not typically a significant part of their formal training. It is also due to the A-E's lack of direct involvement in the actual construction. The CM can correct this inability by obtaining cost estimating experts to furnish reliable estimates.</p> <p>2. The CM is available to add another dimension in the expertise of the A-E. Advocates of the CM process believe that expensive and wasteful design inefficiencies can be reduced in part by introducing more construction know-how into the design phase.</p> <p>3. According to those who favor the CM method, the construction manager can prevent "seat of the pants" management styles from creeping into the process by offering management expertise to the construction contractor. Can prevent:</p> <ul style="list-style-type: none"> * Poor crew balances * Craftsmen waiting for materials * Equipment breakdowns * Lack of project planning and scheduling * Sloppy accounting practices <p>4. The CM process may offer some relief from the long process by fast tracking the project. (That is merging of the design and the letting of the contract for the construction portion, which overlap) An Indefinite Quantity delivery order can sometimes be used, eliminating the time required for the A-E selection process.</p>	<p>Critics of the CM counter that outside cost estimates are not always accurate because the cost estimator must be intimately involved in the project. As an outside source it would not be privy to such info.</p> <p>An over-zealous CM may cause some conflict. The A-E may not appreciate being criticized for what he believes is appropriate. The A-E is being paid for its expertise in matters of design. The CM may have prejudices, or fixed ideas that may be in conflict.</p> <p>The construction contractor resents an "outsider" coming in and telling the superintendent on how to run his/her operation. Therefore, the CM's involvement in these areas can sometimes backfire.</p> <p>Trained personnel must be available to the CM in order to make day-to-day decisions about the alternatives presented to the contracting officer. Without expertise and timely decisions any fast tracking system will present cost overruns.</p>

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Question : How does the Government go about selecting a Contract Manager for a CM Contract?</p> <p>Answer: Through Source Selection, NOT THE BROOKS ACT.</p>	
	<p>Tell the students: The Source Selection method is sometimes appropriate to use in <u>environmental work</u> when the tasks and overall requirement fall outside the Brooks Act.</p> <p>It may also be used in some agencies for design work when the government awards a construction management contract and leaves the selection of the A-E up to the construction manager.</p>	
	<p style="text-align: center;">THE DESIGN-BUILD CONTRACT</p> <p>The design build is a single contract issued for <u>BOTH the designing and the construction portions</u>. Although design-build differs from traditional contracting in terms of risk allocation and the relationships between the contracting parties, the elements essential to successful completion of a project remain; unchanged, i.e.:</p> <p>Show viewgraph 1-12.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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DESIGN-BUILD

THREE ELEMENTS

1. Direct Interaction between A-E & Government (if desired).
2. Strong & Knowledgeable Management of Project through all Phases.
3. Short & Direct Lines of Communication between A-E, Govt. and Construction Team.

VG 1-12




Like any of the other contracting methods, design-build is best suited for certain situations and there are some criteria which should be considered in determining whether the design-build method is appropriate for any particular project. In assessing the suitability, the nature of a project should be carefully considered in the determining whether it is appropriate. Show Viewgraphs 1-13, 1-14, & 1-15.

DESIGN-BUILD

APPROPRIATE WHEN PROJECT:

- Is Repetitive in Nature (e.g. housing)
- Doesn't Need Detailed Govt. Input
- Is Complex & Govt. lacks Expertise
- Is Highly Classified

VG 1-13

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Tell the students: Now let us look at the advantages and disadvantages.	

DESIGN-BUILD

ADVANTAGES :

- Price known and agreed upon initially.
- Govt. relieved of admin. burden.
- Time saved by awarding only 1 contract.
- Control kept by keeping rights to OK.
- Teamwork promoted.
- Only one entity to deal with.
- Designer & Builder on same team.
- Compatible with fast tracking.

VG 1-14

DESIGN-BUILD


DISADVANTAGES:


- Govt. may give up decision making.
- Building codes evolved Traditionally.
- Competition limited.
- Quality may be sacrificed to cost.
- No checks & balances as in Traditional.
- Difficult to trace costs to Design or Construction.

VG 1-15

Advantages of the design-build approach are many. It saves time; it can save money; it consolidates the responsibility for project success under one entity. However, without adequate attention to the potential risks and liabilities inherent in the design-build model, it can become bogged down in legal issues.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Although many of the basic project concerns mirror those accomplished in a traditional construction project, i.e.,</p> <ul style="list-style-type: none"> * Cost overruns, * Liability for delay, * Warranties, and * Performance guaranties, <p>the design build model can offer a unique context for organizing these risks. Sometimes the advantages create other disadvantages. (i.e., Both the designer and the builder will be contributing their expertise throughout a project.) Although this cooperation promotes:</p> <ul style="list-style-type: none"> * Efficiencies, * Reduces overall project time, and * Facilitates harmony of design concepts and buildability, <p>it <u>obscures the chain of responsibility</u> for cost overruns, delays, building systems, or structural failures, to note only a few of the ways that a project can go awry.</p> <p>The same concerns are also experienced when awarding a Contract Management contract for both design and to build a facility. In this case it is adding a third party to the situation.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>That the design-build poses a <u>unique problem in bonding</u>.</p> <p>Despite the fact that they could probably charge higher prices for doing so, sureties may not be willing to write performance and payment bonds for design-build projects because of the uncertainty of costs at the time of award.</p> <p>The problem can be solved however if the bonding company is willing to <u>bond on an incremental basis</u>, but not all bonding companies are willing to do so. The problem also poses a special problem for the Government for the same reasons.</p> <p>Further explain to the students that typically in the design-build mode, it is the Government's responsibility for</p> <ul style="list-style-type: none"> * Providing the land upon which the project will be constructed. * Furnishing borings and foundation reports. * Obtaining environmental and zoning permits. * Providing fuel supply and power sales agreements. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p data-bbox="477 247 928 285" style="text-align: center;">THE TURNKEY METHOD</p> <p data-bbox="331 373 870 407">Turnkey has been defined by the courts as</p> <p data-bbox="380 428 1029 562" style="padding-left: 40px;">"a contract in which the contractor agrees to complete the work of the building and installation to the point of readiness of operation or occupancy."</p> <p data-bbox="331 583 1071 642"><i>Hawaiian Independent Refinery, Inc. v. United States, 697 F.2d 1063, 1065 n.4(Fed. Cir.), cert. denied 464 U.S. 816....1984)</i></p> <div data-bbox="191 714 272 793" style="border: 1px solid black; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 10px 0;">?</div> <p data-bbox="331 714 487 747"><u>Question :</u></p> <p data-bbox="331 756 1071 835">What are the advantages and disadvantages of using this method?</p> <div data-bbox="191 894 272 974" style="border: 1px solid black; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 10px 0;"></div> <p data-bbox="331 877 467 911"><u>Answer:</u></p> <p data-bbox="331 915 951 949">Show VG 1-16 while explaining the following:</p> <p data-bbox="341 987 1071 1449">The term design-build is often used interchangeably with the term "turnkey". However there are some <u>minor differences</u>. For example, turnkey often is applied in situations in which the owner is not only receiving design and construction services from the same entity, but is also receiving <u>financing</u> for the facility, as well as <u>operation and maintenance services</u>, from the turnkey contractor. Nevertheless, despite some trade differences, it does not appear that there are any judicial distinctions.</p> <p data-bbox="341 1495 1071 1659">Therefore it is important to remember that using either the term design-build or turnkey will, in itself, NOT shift all of the risks from one party to another.</p> <p data-bbox="341 1705 1071 1869">A turnkey contractor can be either an A-E or construction contractor. Although design is a major element in this method, the A-E is usually selected by source selection</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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TURNKEY

SIMILAR TO DESIGN-BUILD EXCEPT:

- Contractor furnishes other services such as Financing, Site Selection, and Operating the Facility.
- Govt. does not have approval rights

Advantages & Disadvantages Similar to Design-Build.




VG 1-16

THE INDEFINITE QUANTITY CONTRACT (IQ)

One of the most popular means of utilizing the traditional method is by issuing a deliver order under an Indefinite Quantity contract. It is a suitable and appropriate way of providing the services without going through the process of A-E selection for each project. These contracts are designed for relatively small projects requiring similar types of work.

- They should **not be used** for work where wide variation in tasks may be expected because there would be no assurance that the contractor would be the most qualified firm for all tasks in such a situation.
- In cases where the prime A-E must subcontract a significant portion of the anticipated work to consultants not identified during the slate/selection/negotiation process, the appropriateness of this contracting vehicle would be questionable.

This method of contracting differs from the traditional means already discussed, because the Basic Contract is already in place. The A-E has already been selected. Once the design has been completed, the construction contract is let, much the same as in the traditional method.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question :</u> What are the advantages and disadvantages of the IQ contract?</p>	
	<p><u>Answer:</u> Allow the students to come up with their answers and write each one on the blackboard or the flowchart board.</p>	
	<p>Show Viewgraphs 1-17 on advantages and 1-18 on disadvantages. Tell students IQ contracts are covered in their Text/Reference in Appendix B.</p>	

IQ CONTRACTS

ADVANTAGES :

- Time savings.
- Less administrative burden.
- Less time needed for negotiation.
- Simplified Statement of Work.
- Base year plus option for extension.
- Excellent for environmental work.
- Cost effective.

VG 1-17


IQ CONTRACTS

DISADVANTAGES:

- Not suitable for large projects.
- Estimate of need is sometimes difficult.
- Must be confined to specific type of work.
- Danger of not having the most qualified A-E for the project.

VG 1-18

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>The following exercise is introduced for learning reinforcement.</p>	
	<p style="text-align: center;">CLASSROOM EXERCISE CE-1.2</p> <p style="text-align: center;">"THE BIG DECISION"</p>	
	<p>Time: 75 Minutes</p> <p>Method: Group Work (45 minutes) Spokesperson Makes Presentation (30 minutes)</p> <p>Instruction: Following the discussion, announce that the class will now be given various scenarios in which they are to <u>make a decision as to which way to proceed with their A-E procurement of services.</u></p> <p>Tell the class to turn to their Classroom Exercise Book to 1.2 SCENARIOS.</p> <p>Assign each group one scenario which they are to analyze and <u>prepare a presentation on their decision</u> on types and methods of contracting that would best execute the project given the problems described in the scenario. Students are to use the flip charts provided in their presentation to the rest of the class.</p> <p>Once they have completed preparations for their presentation, they are to read the other scenarios, discuss among themselves, reach a consensus, and be prepared to question, challenge, or offer comments on the other group's presentations.</p> <p>The spokesperson for each group will be selected by the group and will be responsible for the presentation to be made.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p style="text-align: center;">Instructor's Key to Classroom Exercise CE-1.2</p>	
	<p>There is no right or wrong answer to this exercise. It is purely subjective, and rests a great deal on agency policy. Instead, it will provide the students with an opportunity to share with the class as to what led them to make decisions. The groups may find that making a decision in which all of them agree may be difficult.</p> <p>Scenarios are not meant to be complete. Students may point this out and suggest the need to get more information. This is a very realistic situation; suggest possible information that might be obtained.</p>	
	<p>After each group presents their scenario, ask other groups if they have any comments. Instructor should guide, amplify, and clarify as discussion takes place.</p>	

CLASSROOM EXERCISE CE-1.2

"THE BIG DECISION"

Time: 75 minutes

Method:	Group Work	45 minutes
	Spokesperson Makes Presentation	30 minutes

Instructions:

Your instructor will assign to your group one of the scenarios printed on the following pages. Using the materials from your Text/Reference (pages 1-10 to 1-17) and the information from the lecture which was provided by your instructor on the various means of executing a request for procurement of architectural engineering services, the group is to arrive at a consensus of how they would approach the procurement based on the information provided in the scenario, i.e.

- By the traditional method of procurement.
- By the Contract Management contract.

(If this method is chosen, detail how much of the requirement would be delegated to a contract manager, i.e., the design only, construction only, or both).

- The Design-Build method.
- The Turnkey method.
- By issuing a delivery order against an existing IQ contract.

Once the group has established what their position is going to be, the spokesperson transfers it to a flip chart and prepares a presentation to the class on their position, relating the rationale for the decision.

Once your scenario solution is prepared, the group should proceed to read the other scenarios and reach a consensus on a methodology so that you will be prepared to ask questions and discuss all of the scenarios solutions as they are presented.

DAMMING THE MISSISSIPPI

The Government has a requirement to design a multi-million dollar dam to harness future flood waters on the Mississippi. Due to the past summer's floods which caused huge monetary losses, there is a great deal of pressure to get this dam built at the earliest date. Congress will be very impatient with delays. Money is also a problem. Congress has also indicated that once the design has been finished and approved, money for the construction will be made available on an incremental basis. The project will require precise cost estimating, and will require expertise in management techniques to assure its timely completion.

"ALL THE WORLD'S A STAGE"

The Government has submitted to your office a request for design services to build a theater. The theater is to be state of the art, as to sounds and acoustics. It will be fashioned to seat 500 people comfortably, and designed in such manner as to provide an uninterrupted view of the elevated stage. The project is the "pet" of the head of design who is already pressuring to award as soon as possible without all of "those unnecessary procurement steps that contract specialists have to go through." The estimated cost of construction is 4.2 million.

A "FIXER - UPPER"





The Government has an urgent need to rehabilitate and renovate a structure currently used as storage, to convert it into a mechanical garage which will be used to repair vehicles. Using the present concrete slab, the design will include that of a hydraulic grease rack, as well as storage cabinets along the walls of two sides which can be locked. The project is estimated to cost (ECC) \$250,000. There is currently an Indefinite Quantity plumbing/heating contract in place to be used for such small jobs. Your boss has agreed to obtain design as fast as possible in order to meet the customer's required deadline.

"THE HOT POTATO"

The Government has issued a need for some environmental site clean up. The project itself, carries a high priority. It is a project that has been on the back burner for years, and has suddenly become a "hot potato". Not many details are available. The design portion consists of identification of contaminants and recommendation as to clean up methods and procedures. Accurate estimates of costs are required, as well as research as to the state of the art in cleanup methods and procedures on this type work. Once the Government reviews and approves the design, a contract will be let for clean up using the designer's specifications. Although there is usually an indefinite quantity design contract in place, your office has not awarded the new one. The contract specialist who is working on that contract states that it will be approximately 60 to 90 days before it will be in place. The A-E fee is estimated to be no more than \$125,000.

"HOME SWEET HOME"

The Government has submitted a procurement request for a 300 unit housing development. The request states that they want the contractor to finance, design and build the housing units. When the buildings are completed and accepted, the Government wishes to lease each unit from the contractor for a period of 20 years. The contractor will manage, and maintain the houses during this period. The housing units will consist of two and three bedrooms with a minimum of two bathrooms in each structure. The houses will be constructed on land selected and belonging to the contractor but must be located no more than 10 miles from the nearest Army base. Completion time is important, but not considered critical. The Government would also like to approve the design prior to construction, and would like to approve of the subcontractors to be employed on the construction contract.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Once the exercise is completed, proceed on to discuss Partnering.	
	PARTNERING	
	<p>Tell the students:</p> <p>There is also available a unique method of contract administration which deserves attention in your decision making. A decision as to its use must be made early on. It is called PARTNERING.</p>	
	<p><u>Question?</u></p> <p>What is Partnering?</p> <p><u>Answer:</u></p> <p>Partnering is an innovative contract administration concept used in A-E and construction contracting based on the premise of a Government-contractor relationship that promotes achievement of mutually beneficial goals.</p>	
	<p><u>Question?</u></p> <p>Ask for a show of hands for those who have been involved in partnering, questioning those that show they have experience as to whether it was a good experience. Upon conclusion of discussions, proceed to show the viewgraph "Steps Involved In Establishing Partnering."</p>	
	<p><u>Answer:</u></p> <p>Show Viewgraph 1-19.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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PARTNERING

- STEP 1:** Establish Personal Contact, Commitment.
- STEP 2:** Approve Joint Statement of Mutual Goals.
- STEP 3:** Identify Disputes Prevention Process.
- STEP 4:** Establish Joint Workshops.

VG 1-19



Show Viewgraph 1-20 on advantages and Viewgraph 1-21 disadvantages

PARTNERING

ADVANTAGES:

- Creates a climate which fosters success.
- Removes adversarial attitudes.
- Establishes & maintains communication.
- Promotes & fosters cooperation.
- Harnesses capabilities, talents, and positive energies of both parties.

VG 1-20

PARTNERING

DISADVANTAGES:

- Govt. and A-E may become too close.
- Contract requirements may become relaxed.
- Too much concern on relationship as opposed to getting the job done.
- Not worth the time and effort.

VG 1-21

TOPIC: **1.3 LEGISLATIVE HISTORY LEADING TO THE BROOKS ACT**



Ref: Text/Reference Pages 1-19 through 1-22

Objective: Describe the Legislative History of the Brooks Act

Time: 3:00 - 3:15

Method: Lecture, Interactive Discussions

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>"There have been numerous laws passed which affect the A-E process. The <u>Brooks Act</u> is, of course, the one which provides the guidelines for the contracting process as we know it today.</p> <p>There have been <u>other laws</u> passed prior to the Brooks Act which are still on the books that affect the way A-E contracting is accomplished.</p> <p>It is important that we understand the background of the design and construction industry, how it has evolved, and the changes which have been brought about.</p>	
	<p><u>Question :</u></p> <p>Ask the students what generates major changes in laws and regulations?</p> <p><u>Answer:</u> (listing a few)</p> <ul style="list-style-type: none">• Politics.• State of the Art changes.• Social changes.• Pressure from outside groups.	

**Tell the students:**

In order to better understand how the A-E process has evolved, let's go back and trace how the profession developed.

**Note to Instructor:**

The following narrative is provided for you to use in explaining the evolution of the A-E and construction community as we know it today. Feel free to augment using your own stories.

"HISTORY OF THE A-E EVOLUTION"

The A-E profession actually had its beginning about 2750 BC, designing projects which called for the use of sticks and stones, or picks of antler, such as the builders of Stonehenge which called for a circle 320 feet in diameter through solid chalk to be dug. Seven hundred years later the Egyptians performed miracles in constructing the pyramids. They leveled the desert perfectly and surveyed the site to orient the pyramids without the use of equipment and instruments. The first of the great architects to be recognized was known as Imhotep to the Egyptians and Imouthes to the ancient Greeks. He had a legendary reputation as a physician and man of learning. His work on the Pharaoh Zoser's stepped pyramid advanced the science of stone masonry. There were other great fetes of architecture - The Great Wall of China, the magnificent cathedrals of Europe, and the aqueducts of Rome, just to name a few, were designed and built by "master builders".

This era is also remembered for their promotion of Government buildings. The emergence of Government buildings in the form of impressive architectural designs was important, and from that day forward, the design of Government buildings has always been a reflection of the times, the social changes, and the political climate of the different eras through the 20th century.

The Renaissance was an era of great artists, such as Michelangelo, who began calling themselves architects in plying their trade. They saw themselves more artists than engineers in those days. They established autonomous or semi-autonomous studios in which to cater to their patrons. In those times the process was still relatively simple. The so-called architect, would prepare drawings with some description of the quality of materials desired to meet the requirements of their client. These drawings would be turned over to the artisans, craftspersons, and workers to guide them in the construction of buildings for their patrons. If any of the students have attended one of the Renaissance faires which have been growing in popularity around the country, they have witnessed the early trades which have been handed down in the construction community. Some of those trades, such as brick and stone masons still practice their trades in much the same way today.

Most of the agreements in the early days between the architect and the rulers or Lords were issued verbally. Life was simple and fewer parties involved in the process. However, since Michelangelo's time, design has evolved into a formal process, abundant in paper work and multiple layers of people. The formal process actually had its beginning sometime during the industrial revolution, when general contractors first began appearing on the scene. The industrial revolution brought about many changes with the invention of instruments and heavy equipment, such as the tractor. Along with the evolution of the A-E designer and the construction contractor, there came a need to formalize things, such as a written instrument called a contract. Certain standards were developed and laws were passed. Gradually the A-E designer branched off from the General Contractor role and began to specialize more in the paper work, drawings, etc. divorcing itself from the actual construction part of the project. This resulted in A-E services becoming a professional service, leaving the construction portion to builders.

In the United States in the later part of the 1700s the first of the professional architects was recognized and offered positions within the Government to build numerous Government buildings. Architects were "commissioned" to design buildings from within the Government itself. Up through the early part of the 20th century, design was accomplished for the most part by in-house forces. Occasionally a contest would be introduced, but this trend never became popular with either the Government or the architects.

"HISTORY OF THE A-E EVOLUTION"

(Continued)

During the depression years, in order to counteract the jobless rate and promote the economy, the Government embarked upon the design and building of thousands of new buildings and public works projects across the United States, creating a "boom" in the design and construction community. Because of the tremendous increase in the need for Government oversight on these projects, several offices were consolidated, creating a cadre of design and construction engineers within the Government to design and oversee the projects. Most of the buildings seen in Washington D. C. today are a direct, or at least an indirect result of this era.

In 1939, with the threat of war looming in the background, the Government turned its attention from the Government buildings born during the depression years, to that of quickly building up military strength, which called for military installations and air runways to be built. A few design requirements were contracted with the private sector, some of which were the result of "contests" between A-Es competing for an award. Legislation, Public Law U.S.C. 4540, authorizing the Secretaries of War and the Navy Department to contract with practicing architects and engineers for the production of designs, plans, drawings, and specifications for public works projects and facilities without regard to statutes which required public advertising and competitive bidding was passed. This was the first of several significant laws to be passed.

Ask the students to turn to Exhibit 1-7, page 1-21 of their Text/Reference. Go over the synopsis of laws listed to conclude the lesson on the history leading up to the Brooks Act.

This was also the law that established the maximum 6% design fee because Congress feared that with the new law, architects would charge unreasonable fees for their services. With passage of the new law, the flood gates opened. The new philosophy of the United States Government was to pour all of the A-E design requirements out into the private sector. However, the flow was even greater than anyone anticipated. The Government's design departments became deserted offices, and to reverse the flow, a measure was quickly passed which required the agencies to retain a certain percentage of their requirements in-house.

With this dramatic shift in the method of acquiring design services, there became a need for new laws and regulations. The existing laws required advertisement and competitive bidding procedures on all procurements unless the requirement came under one of 17 exceptions. The ASPR stated in one part that A-E services would be obtained on the basis of the ability of the A-E to perform, rather than price, as had become the custom within the old Navy Department, as well as the Army. However, nowhere in the 17 exceptions were A-E design services addressed. There was growing confusion and dissatisfaction with the guidance given. The agencies were not consistent in their use of the same exception which allowed them to negotiate A-E contracts. Eventually the Comptroller General became involved, made a study, and recommended to Congress that A-E contracts be competed on price quotations. Congress decided to perform a study to resolve the problem, and five years later, as a result of the study, passed what we know as The Brooks Act, ignoring the Comptroller General's recommendation. The Brooks Act basically encompassed and codified what had already become customary in the trade.



TOPIC 1.4 FORECASTING REQUIREMENTS FOR PROFESSIONAL SERVICES

Ref: Text/Reference Pages 1-23 through 1-24

Objective: Upon completion of this lesson topic, students will be able to assist requiring activity in forecasting, developing, and maintaining program plans, budgets, and schedules for A-E services which reflect lead times, market conditions, and procurement strategies.

Time: 3:15 - 3:30
 3:30 - 4:30 Questions and Reading

Method: Lecture, Discussion

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>In the procurement process all needs are identified and created for many reasons. They can be</p> <ul style="list-style-type: none"> • Real or apparent. • Existing, or • Externally pressured or self-generated. 	
	<p><u>Question :</u></p> <p>Ask the students:</p> <p>In the construction environment, of which design contracts are only a part, how do you perceive that needs are identified?</p> <p><u>Possible Answers:</u></p> <ol style="list-style-type: none"> 1) <u>User Driven:</u> Such as a need to establish, improve, or upgrade services, building office buildings, airports, housing, etc. 2) <u>Technology Driven:</u> A new, improved, or advanced technology, such as the space program. 3) <u>Research Driven:</u> Complex projects to design, usually generated by studies conducted by the Federal Government, local interest groups, or by the Corps of Engineers. <ul style="list-style-type: none"> • Ecology • Hydroelectric power • Recreation facility • Transportation • Waterways, ports, piers, etc. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 247 272 321" data-label="Image"> </div>	<p data-bbox="331 237 488 275"><u>Question :</u></p> <p data-bbox="331 281 948 359">Once the need has been identified, who is responsible for initiating the project?</p> <p data-bbox="331 401 467 438"><u>Answer :</u></p> <ol data-bbox="331 474 1078 993" style="list-style-type: none"> <li data-bbox="331 474 1078 684">1) The "user" or the "client" has the responsibility to project its own needs. It may be forecasted on an individual basis or in terms of multiple projects over a long term, usually 3 - 5 years because that corresponds with the Congressional budget cycle for large dollar value projects. <li data-bbox="331 716 1078 993">2) Once it is acknowledged that there is a need, many people become involved in gathering together all of the information needed in order to establish a budget, i.e. <ul data-bbox="477 873 1078 993" style="list-style-type: none"> <li data-bbox="477 873 837 905">• Form a concept of design. <li data-bbox="477 905 1078 961">• Obtain all of the necessary studies and permits that are required, as well as <li data-bbox="477 961 911 993">• develop procurement strategies. <p data-bbox="380 1035 1078 1346">In order to coordinate all that needs to be done prior to a project being transferred to the procuring activity, a <u>program or a project manager</u> is usually appointed as the person responsible for carrying the need forward. In smaller offices, without an appointed project manager, the contract specialist or contracting officer may be required to assist the client in performing this function.</p> <p data-bbox="380 1367 980 1465">Quiz members of the class as to how this is accomplished in their agencies (to stimulate discussion.)</p> <p data-bbox="331 1535 1078 1654">As just discussed, design and construction, as in most other fields, begins with an idea, or a need the Government has to build something.</p> <p data-bbox="331 1682 1078 1843">However, an idea or a need, is only an illusion unless it is combined with another ingredient - MONEY. Funding can be a major obstacle to overcome.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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THE WRAP UP

In conclusion, ask the students, one at a time, to answer the questions presented at the end of the scenario at the beginning of the chapter.

This is the time that the instructor must be sure that the information which has been covered has been understood by all students. It also is a good time for reinforcement of material already covered. The review of the scenario questions is merely an opening for all questions to be presented for discussions.

The questions addressed in the scenario, Lesson One were as follows:

- 1) What is different about contracting for A-E services?
- 2) How has A-E emerged as a profession?
- 3) Do you agree with Jim's outlook?

In the scenario, one of your fellow contract specialists was about to sit through a class similar to the one you are now enrolled in. Jim had some private thoughts about what he was about to sit through in class. (You may have had similar thoughts.)

Learning about the history of how the A-E profession evolved gave Jim some insight as to how social changes can effect the manner in which the future is shaped. Passage of the Brooks Act provided assurance that the Government may continue to obtain the best in design services. Jim found the in-depth explanation of the Brooks Act covered in class to be very informative. As a result, he can now be confident that his contract actions will be strictly in accordance with the correct procedures. Surprisingly enough, he didn't "sleep through class."

Do you have a better understanding of the Brooks Act?



Tell the Students:

Tomorrow we will discuss the Brooks Act in more detail, and elaborate on the project manager's role and explore the planning process.

Evening Reading Assignment:

Review Chapter 1 and read Chapter 2 on PLANNING.

LESSON PLAN
PLANNING
CHAPTER 2

TIME	LESSON	OBJECTIVES
8:00 - 8:30	2.0 Introduction	
8:30 - 9:00	2.1 Determine if Brooks Act Applies	<ul style="list-style-type: none"> • Definition of A-E Services. • Licensed, registered, or certified. • Incidental services. • Firms permitted by law to practice. • Decision to use-in-house assets
9:00 - 9:15	2.2 Define Roles and Identify Key Personnel	<ul style="list-style-type: none"> • Requiring Activity / User • Project Manager • Design Manager
9:15 - 9:35	B R E A K	
9:35 - 10:20	Exercise 2.2	
10:20 - 11:15	2.3 Perform Market Research	<ul style="list-style-type: none"> • Definition of market research & survey. • Collecting data from SF 254, 255 • Small Business concerns
11:15 - 12:00	Exercise 2.3	
12:00 - 1:00	L U N C H	
1:00 - 1:30	Exercise 2.3 (cont.)	
1:30 - 2:00	2.4 Choose Contract Type & Method	<ul style="list-style-type: none"> • Complexity of the project • Accurate SOW • Repetitive services
2:00 - 2:15	2.5 Develop Acquisition Plan & Milestones	<ul style="list-style-type: none"> • Definitions • Bring all variables together
2:15 - 3:45	Exercise 2.5 & BREAK	
3:45 - 4:30	Questions & Reading	

LESSON PLAN PLANNING

LESSON TOPIC GUIDE

FEDERAL ACQUISITION INSTITUTE

TOPIC: 2.0 PLANNING


Ref: Text/Reference Pages 1-1 through 1-4


Objective: Provide a basic understanding of A-E procurement procedures, including how to determine if the Brooks Act applies, defining roles and responsibilities of those involved, and general planning, including market research.

Time: 8:00 - 8:30

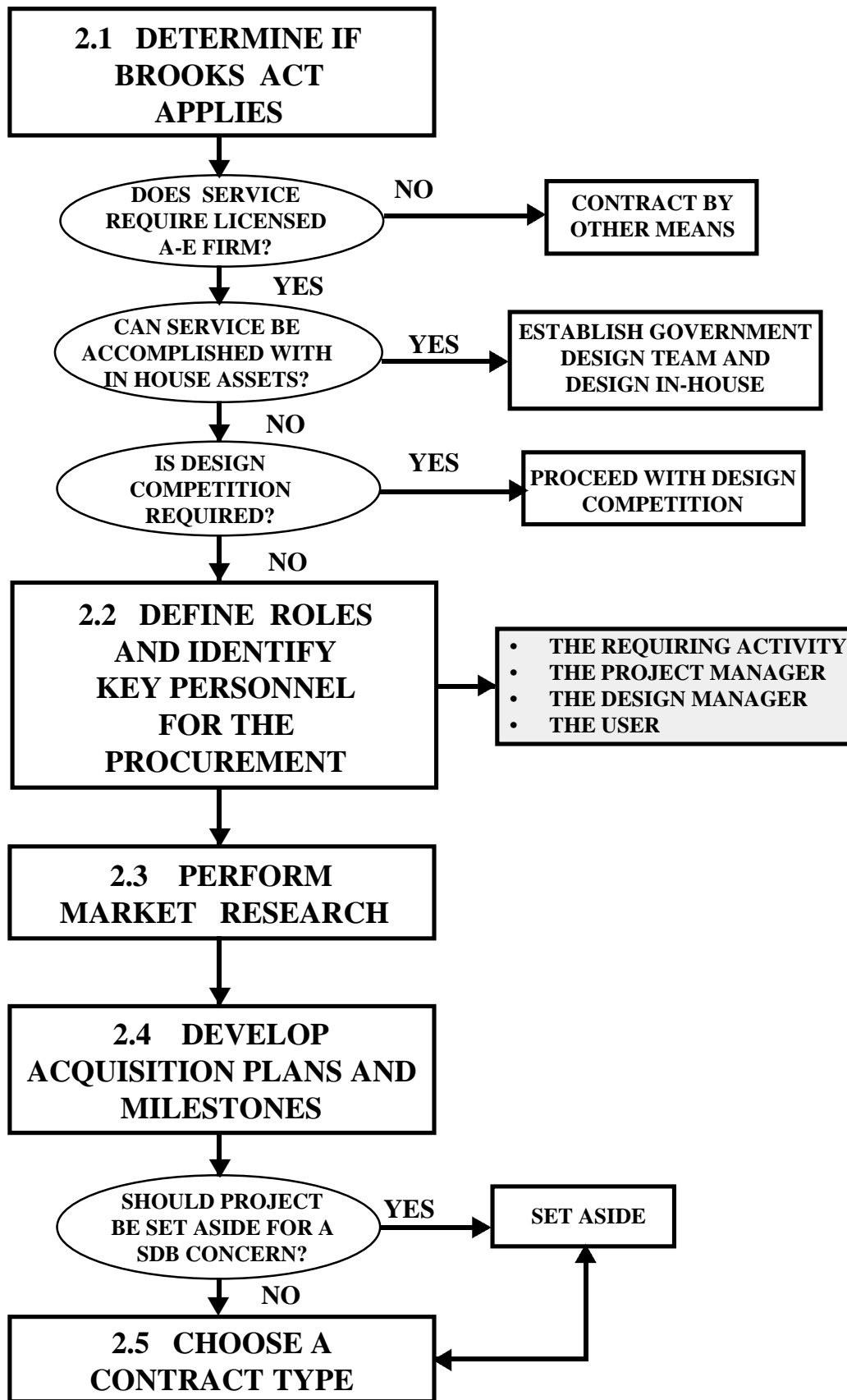
Method: Lecture, Flowchart

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Overview and Objectives of Chapter 2.</p> <p>Tell the students:</p> <p>The second lesson will explore the planning requirements by first, determining for sure <u>if the Brooks Act actually applies</u> to our requirement. Sometimes there is a very fine line in determining if it is considered to be under the Brooks Act or the Services Contract Act.</p> <p>Once it has been determined to be under the Brooks Act, the acquisition planning can become more specific. <u>Who plays what roll</u> in the planning process becomes more important. <u>Market research</u> must be accomplished and the type and method of contracting must be determined.</p> <p>You will be doing three exercises today : the first two set-up the Acquisition Plan exercise which is the big exercise for this afternoon.</p>	<p>Note to the Instructor:</p> <p>As you go through today's lesson, be sure to make references to the fact that the day's topics are addressed in the Acquisition Plan.</p>

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Interject a motivating statement or story and review the scenario at the beginning of the Text/Reference, Chapter 2. Ask the class what Sarah's concerns are.	What services are considered professional? How are sources identified? Who are the key players?
	Tell the students: Turn to page 2-4 in the Text/Reference. Lead the students through the <u>flowchart</u> briefly explaining each step in the flowchart.	(See Page IG 2-3 for copy of flowchart)

STEPS IN ACQUISITION PLANNING



TOPIC: 2.1 DETERMINE IF BROOKS ACT APPLIES


Ref: Text/Reference Book, Pages 2-5 through 2-12

Objective: Upon completion of this lesson topic the student should be able to determine if the Brooks Act applies, as well as make other decisions in planning the procurement of A-E services.

Time: 8:30 - 9:00

Method: Classroom discussions, Lecture, Viewgraphs

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Begin the discussion of the chapter by showing Viewgraph 2-1, leaving it remaining on the screen while continuing the discussion of the meaning of A-E services.</p> <p>Note to the Instructor:</p> <p>During the discussion which follows instructor should <u>not get bogged down in too many details</u>, (i.e., regarding the 6% fee limitation, etc.) If it comes up, instructor should say that it will be discussed in detail in other chapters.</p>	




DEFINITION OF A-E SERVICES

FAR 36.102

Professional services of an A-E nature:

1. As defined by State law, if applicable, which are required to be performed or approved by a person LICENSED, REGISTERED, OR CERTIFIED to provide such services.
2. Associated with research, planning, development, design, construction alteration, or repair of REAL PROPERTY; and
3. Or INCIDENTAL SERVICES, which members of the A-E professions (and individuals in their employ) may logically or justifiably perform.

VG 2-1

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>Let us discuss the terminology used by the FAR in this definition. We will begin by first discussing what 'LICENSED, REGISTERED, OR CERTIFIED' means in the text of the first paragraph in the definition.</p> <p>First, take the word "licensed" as referred to in the FAR - The <u>architect</u> is the prime professional on most building projects. Architects are required to be licensed by the individual states where they practice. Licensing is intended to assure that all architects have demonstrated a basic competence and are capable of practicing with due regard for the public's health, safety and welfare.</p> <p><u>Engineers</u> are also licensed by the states, although each profession and the agencies regulating them sometimes differ over where one profession begins and the other ends.</p> <p>However, the two professions can be differentiated by project types and their uses. In order to obtain a license an examination must be passed which is conducted by a state agency.</p>	
	<p><u>Question:</u></p> <p>Does this mean that the license requirement does not apply outside the United States, or in a State that does not have registration requirements for the particular field involved?</p> <p><u>Answer:</u> Yes.</p>	
	<p>"Refer the students to <u>Exhibit 2-2, page 2-7</u> in the Text/ Reference for a complete list of typical services performed by licensed A-E firms.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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Question:

In paragraph 2 of the definition, what is meant by "REAL PROPERTY," as referred to in the FAR definition of A-E services?

Answer:

In general, real property is land and all interests in land, including all buildings attached thereto.



Note:

Buildings, houses, fences, gravel in a pit, stone in a quarry, and trees and shrubbery are all considered "real property." However, upon severance from the land by act of an owner of the land, these articles then become personal property (to move a building, quarry a stone, or to cut trees is considered severing them from the land.)







Question:

In Paragraph 3 in Viewgraph 2-1, what is meant by "INCIDENTAL SERVICES"?

Answer:

Types of services which are considered minor to some part of the A-E services, BUT NOT INCIDENTAL TO AN A-E PROJECT.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>The test to be used in making a determination, is</p> <ul style="list-style-type: none"> • NOT whether the service is incidental to a <u>traditional A-E project</u>, but rather: • Whether the service is the type which is incidental to <u>professional services</u> of an architectural or engineering nature, AND IF IT IS, whether the service is one which members of the A-E profession may logically or justifiably perform. <p>Surveying and Mapping are good examples.</p> <p>Surveying is considered to be an architectural and engineering service which will be procured pursuant to FAR Part 36.</p> <p>Mapping is a different matter. It requires a different interpretation. Up until 1988, if mapping services were required they were procured using OTHER THAN BROOKS ACT PROCEDURES. Various agencies had different interpretations and ultimately the GAO became involved. As a result, the FAR was changed, adding new language which specifically addressed the mapping services issue as follows:</p> <ul style="list-style-type: none"> - Mapping associated with research, planning, development, design, construction, or alteration of real property is considered to be an A-E service. - Mapping services performed by the Defense Mapping Agency, not connected to traditional A-E services, are not considered to be A-E services. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>What if the statement of work includes both services which have been identified as A-E services, and other services which are NOT CONSIDERED as such?</p> <p><u>Answer:</u></p> <p>The contracting officer shall follow Brooks Act procedures if the statement of work SUBSTANTIALLY, OR TO A PREDOMINANT EXTENT, specifies performance or approval by a registered or licensed architect or engineer.</p>	
	<p><u>Question:</u></p> <p>When services are required which do not require performance by a registered or licensed architect or engineer, and the service cannot be classified as an incidental service, how are these services obtained?</p> <p><u>Answer:</u></p> <p>They will be acquired pursuant to FAR parts 13, 14 and 15, even though architects-engineers may actually perform the services.</p>	
	<p>Ask the class to name some of these services:</p> <p>Their answers should include:</p> <ul style="list-style-type: none"> • Auditing, accounting analysis or investigation. • Environmental impact assessments free from technical engineering considerations. • Management consulting services. • Routine laboratory material testing services. • Environmental, archaeological, or historical surveys of a routine nature, where engineering judgment is not required. • Training or instruction outside of an A-E nature. • Studies involving purely social, economic or psychological phenomena. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
?	<p><u>Question:</u></p> <p>Thus far we have determined WHAT IS and WHAT IS NOT considered an A-E service under the Brooks Act. There is one more consideration to be made. What is it?</p> <p><u>Answer:</u></p> <p>A contracting officer SHALL award A-E service contracts only to firms PERMITTED BY LAW TO PRACTICE.</p>	
	<p>DECISION TO CONTRACT IN-HOUSE</p> <p>as opposed to contracting under the Brooks Act is one that must be addressed on each individual requirement.</p>	
?	<p><u>Question:</u></p> <p>Ask the question: "Who makes this determination in your agency?"</p> <p><u>Answer:</u></p> <p>Allow students to interact. The answer will normally be that the decision is made in other than the contracting office, usually by the Construction/Design people.</p>	
?	<p><u>Question:</u></p> <p>Ask the class to name some of the factors that are considered when facing the decision whether to contract out or perform the service in-house.</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • In house capabilities & expertise • Complexity • Lead time • Funding • Customer driven requirements • Other agency requirements • Existence of an IQ contract 	

TOPIC: 2.2 DEFINE ROLES AND IDENTIFY KEY PERSONNEL FOR THE PROCUREMENT


Ref: Text/Reference Pages 2-12 to 2-13

Objective: Upon completion of this lesson topic students should be able to identify key personnel and describe the roles that each member will play in planning an A-E procurement.


Time: 9:00 - 9:15
9:15 - 9:35 Break
9:35 - 10:20 Exercise 2.2

Method: Discussion, Lecture, Class Exercise

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 T/R 2-12	<p>Tell the students:</p> <p>Having decided the <u>Brooks Act applies</u>, we need to <u>prepare an Acquisition Plan</u>. In order to prepare plan, we first need to think about who will be the <u>key people</u> involved in our procurement.</p> <p>Refer to the Text/Reference (Page 2-12) where the text compares the team approach to procurement planning as being similar to a <u>basketball team</u> preparing for a game. To be successful, the team members must work together. Sometimes we control the ball and at other times we pass it off, or provide assistance. Each player has responsibility throughout the game.</p> <p>Emphasize that there must be a GAME PLAN in every procurement. Different <u>agencies have policies and guidelines to follow</u> to best suit their needs. However, in general, all of the agencies have separate divisions or departments for the various functions.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"> </div>	<p><u>Question:</u></p> <p>Ask the students to name the various departments or divisions which would likely be involved in planning an A-E procurement.</p> <p><u>Possible Answers:</u></p> <ul style="list-style-type: none"> • Design • Legal • Real Estate • Technical • Quality, etc. • Contracts • Construction • Facilities Management • Management <p>The various divisions or departments are responsible for <u>appointing one or more individual(s)</u> with varying responsibilities to participate in the planning, as well as playing an active role in guiding the project to a successful completion.</p> <p>In order for the appointed team members to react in a positive manner, there must be perceived a <u>common goal</u>, otherwise personal departmental interests tend to lead to conflicts and override what is good as a whole for the Government.</p>	
<div data-bbox="191 1220 272 1304" data-label="Image"> </div>	<p><u>Question:</u></p> <p>What are the steps in building an effective acquisition team?</p> <p><u>Possible Answer:</u></p> <ul style="list-style-type: none"> • Identify key personnel from each division who will represent the division's concerns during the acquisition or procurement planning and actual procurement phase. • Assign responsibilities to each team member and make them accountable. • Establish a line of authority for the project manager to a level above the individual division supervisors. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Tell the students to turn to:	
	<p style="text-align: center;">CLASS EXERCISE CE-2.2</p> <p style="text-align: center;">"THE PLAYERS"</p>	
	<p>Time: 30 minutes to prepare 20 minutes to present</p> <p>Method: Group Exercise</p> <p>Purpose: Provide learning reinforcement concerning the various roles to be played in the procurement process, and show how the lead responsibility changes hands several times during the different phases of the process.</p> <p>Instruction: Students are to work in their groups. The spokesperson will discuss the group's findings and rationale at the end of the exercise.</p> <p>Students will review the list of various activities listed in the exercise.</p> <ul style="list-style-type: none"> • In the 1st Column, they will annotate which of the various departments (Using the codes at the bottom of the exercise) would <u>most likely have the lead</u> for each activity; and • In the 2nd Column, list the department(s) <u>most likely to be called upon to support</u> the lead person. 	<p>Note: Emphasize to the students, that due to the differing policies of the various agencies, there may not be total agreement. There may even be dual leads, and two or three support members.</p>

Refer
Students
to
Exhibit
2-5.

- When this is finished, the groups are to complete Column 3 by reaching a consensus on each **time frame**. [Column 4 will be completed as part of Class Exercise 2.5.]

When groups are ready to present, announce that spokesperson for Group #1 will respond to items in Columns 1 & 2; and Group #2 will respond to items in Column 3. (Tell groups #3 & #4 they will be doing the presenting for the Acquisition Plan exercise.)

- Then go down the list activity by activity asking Group #1 for their decision in Columns 1 and 2. Ask if anybody has a different answer.
- Then ask Group #2 the time frame for that activity from Column #3, and if anyone else has a different time for their group or agency.

Point out: that many of these time frames overlap, and they will return to this exercise later when they do their Acquisition Plan and establish milestone dates.

Note: Codes and days on Instructor's Answer Sheet are very subjective and serve only as a guide. Feel free to comment differently.

CLASSROOM EXERCISE CE-2.2

"THE PLAYERS"

Time: 30 minutes to prepare
20 minutes to present

Method: **Group Exercise**

Purpose: Enforcement of learning how the planning team members play various roles at specific times, sometimes taking the lead, and sometimes providing support. Flexibility is needed. Understanding when to play what role is necessary. Teamwork and cooperation is essential.

Introduction: The exercise is found on the following page. Note that there are two columns on the far left which are blank, and one column which describes the activity (steps) in the procurement cycle.

Instructions for Students:

At the bottom of the page there are listed typical department or division personnel which would be involved in planning an A-E procurement. Using the codes provided next to the described departments, identify in

Column #1 who has the lead in each activity, and in

Column #2 who has supportive roles.

Keep in mind that there may be more than one person who would have supporting roles, and in some instances more than one in the lead.

Also bear in mind that different agencies have different policies regarding who does what. Therefore, there probably will not be total agreement within your group. These variances should be brought out by the group appointed spokesperson at the end of the exercise during the discussion period.

Then in Column #3, after discussing within your group, put a time frame for doing each activity. [Column 4 will be completed as part of Class Exercise 2.5.]

CLASSROOM EXERCISE CE-2.2

TYPICAL ACTIVITIES REQUIRED FOR A-E CONTRACT				
ROLES:				
① RESPONSIBILITY	② SUPPORT	ACTIVITY	③ # OF DAYS	√ MILESTONE DATES
		COMPLETION OF REQUEST FOR A-E SERVICES & DEVELOP SCOPE _____		
		OBTAIN FUNDING COMMITMENT _____		
		APPROVAL OF ACQUISITION PLAN _____		
		APPROVAL TO CONTRACT FOR A-E SERVICES _____		
		DRAFT SYNOPSIS _____		
		ISSUE NOTICE TO COMMERCE BUSINESS DAILY _____		
		CBD NOTICE PRINTED _____		
		ISSUE SCOPE OF WORK & CBD NOTICE TO BOARD MEMBERS _____		
		A-E PRESELECTION BOARD CONVENES _____		
		INTERVIEWS CONDUCTED _____		
		A-E SELECTION BOARD CONVENES _____		
		APPROVAL OF SELECTION _____		
		NOTICE OF SELECTION _____		
		REQUEST FOR PROPOSAL LETTER TO A-E _____		
		REQUEST & OBTAIN FIELD PRICING SUPPORT (AUDIT) _____		
		PREPARATION & APPROVAL OF GOVERNMENT ESTIMATE _____		
		RECEIPT OF PROPOSAL _____		
		TECHNICAL ANALYSIS OF PROPOSAL _____		
		AUDIT INFO INPUT INTO PRE-NEG STRATEGY _____		
		PREPARATION OF PRE-NEGOTIATION STRATEGY _____		
		NEGOTIATION TEAM MEETING(GAME PLAN) _____		
		NEGOTIATION _____		
		PREPARATION OF PNM _____		
		REVIEW BY CONTRACT REVIEW BOARD (If required) _____		
		INCORPORATE BOARD COMMENTS (If required) _____		
		APPROVED BY DIVISION ENGINEER (If required) _____		
		APPROVED BY CONTRACTING OFFICER _____		
		REVIEW BY ENGINEERING DIVISION (DESIGN/CONSTRUCTION) (If required) _____		
		OBTAIN FUNDING _____		
		AWARD LETTER /CONTRACT _____		

	U/C	User/client	CS	Contract Specialist
	PM	Project Manager	CO	Contracting Officer
	UM	Upper Management	LO	Legal Officer
	D/C	Design/Construction		

Instructor Key

Classroom Exercise CE-2.2

"The Players"

TYPICAL ACTIVITIES REQUIRED FOR A-E CONTRACT				
ROLES:				
① RESPONSIBILITY	② SUPPORT	ACTIVITY	③ # OF DAYS	√ MILESTONE DATES
U/C - PM		COMPLETION OF REQUEST FOR A-E SERVICES & DEVELOP SCOPE _____	30	
PM		OBTAIN FUNDING COMMITMENT _____	10	
UM		APPROVAL OF ACQUISITION PLAN _____	15	X
UM		APPROVAL TO CONTRACT FOR A-E SERVICES _____	10	
PM - D/C	CS	DRAFT SYNOPSIS _____	7	
CO	CS	ISSUE NOTICE TO COMMERCE BUSINESS DAILY _____	1	
		CBD NOTICE PRINTED _____	10	X
CO	CS	ISSUE SCOPE OF WORK & CBD NOTICE TO BOARD MEMBERS _____	2	
D/C		A-E PRESELECTION BOARD CONVENES _____	14	X
		INTERVIEWS CONDUCTED _____	10	
		A-E SELECTION BOARD CONVENES _____	5	X
ADMIN		APPROVAL OF SELECTION _____	3	
CO		NOTICE OF SELECTION _____	1	
CO	CS	REQUEST FOR PROPOSAL LETTER TO A-E _____	2	X
CO	CS	REQUEST & OBTAIN FIELD PRICING SUPPORT (AUDIT) _____	60	
D/C		PREPARATION & APPROVAL OF GOVERNMENT ESTIMATE _____	10	
CO	CS	RECEIPT OF PROPOSAL _____	30	X
D/C	CO	TECHNICAL ANALYSIS OF PROPOSAL _____	21	
CO	CS	AUDIT INFO INPUT INTO PRE-NEG STRATEGY _____	5	X
CO - D/C	CS - D/C	PREPARATION OF PRE-NEGOTIATION STRATEGY _____	5	
CO - D/C	PM - CS	NEGOTIATION TEAM MEETING(GAME PLAN) _____	5	
CO - D/C		NEGOTIATION _____	5	X
CO - D/C	CS - D/C	PREPARATION OF PNM _____	5	
LO		REVIEW BY CONTRACT REVIEW BOARD (If required) _____	1	
CO	CS	INCORPORATE BOARD COMMENTS (If required) _____	5	
D/C		APPROVED BY DIVISION ENGINEER (If required) _____	1	
D/C		APPROVED BY CONTRACTING OFFICER _____	1	X
CO		REVIEW BY ENGINEERING DIVISION (DESIGN/CONSTRUCTION) (If required) _____	1	
PM		OBTAIN FUNDING _____	1	
	CO	AWARD LETTER /CONTRACT _____	2	X
<div> <div>U/C User/client</div> <div>PM Project Manager</div> <div>UM Upper Management</div> <div>D/C Design/Construction</div> <div>CS Contract Specialist</div> <div>CO Contracting Officer</div> <div>LO Legal Officer</div> </div>				

TOPIC: 2.3 PERFORM MARKET RESEARCH




Ref: Text/Reference Pages 2-14 to 2-30



Objective: Upon completion of this lesson topic, students should be able to:
 Identify and evaluate market research pertaining to A-E firms.
 - Classify as to location, specialized experience, professional capabilities, and capacity.
 - Assure SF 254's and 255's are on file.
 - Evaluate SF 1421(s).




Time: 10:20 - 11:15
 11:15 - 12:00 Exercise 2.3
 12:00 - 1:00 Lunch
 1:00 - 1:30 Exercise 2.3 Discussion

Method: Lecture, Interactive guided discussion, viewgraphs, Classroom Exercise

LESSON PLAN



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>What else do we need to consider before doing the Acquisition Plan?</p> <p><u>Answer:</u></p> <p>MARKET RESEARCH. The term "market" in the case of A-E services pertains specifically to the</p> <ul style="list-style-type: none"> • geographical location of the project to be designed, and • number of firms who possess the cap-abilities to perform an excellent design within the market region. <p>The intent is to assure that competition is received.</p>	
 	<p><u>Question:</u></p> <p>Where do we go to obtain the information that we need?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • From your own agency SF254/255 files. • Synopsis information. • SF 1421s (performance evaluations). • Small Business Administration • Professional organizations. 	Instructor will write the answers on the blackboard or other visual aid as they are received.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>Qualification data files consist of <u>SF254s (A-E and Related Services Questionnaire)</u> and <u>255s (A-E and Related Services Questionnaire for Specific Project)</u>. Any office or board maintaining qualification data files shall review and update each file at least once a year.</p>	
	<p><u>Question:</u></p> <p>What actions should be taken by the Government in maintaining the qualification data files?</p> <p><u>Answer:</u></p> <p>(1) Encouraging firms to submit annually an updated SF 254.</p> <p>(2) Review SF 254s and 255s and update classifications, i.e.</p> <ul style="list-style-type: none"> - Location of the A-E firm. - Specialized experience. - Professional capabilities, and - Capacity, with respect to the scope of work <p>(3) Record contract awards for the past year.</p> <p>(4) File all 1421s.</p> <p>(5) Discard obsolete material if it is no longer pertinent.</p> <p>(6) Posting the date of the review in the file.</p>	
T/R 2-15		Refer students to Exhibit 2-6 in the T/R.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>Who uses these files, and who maintains these files within the <u>agency where you work</u>?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • Evaluation boards • Contracting officer • Any other appropriate Government official, <ul style="list-style-type: none"> - Members of acquisition planning teams. - Small Business Advisors, etc. 	<p>(Instructor: Allow interaction by providing the students an opportunity to reveal where they are maintained within their agencies).</p>
	<p><u>Question:</u></p> <p>What is the FAR requirement on submission of the SF 254 and SF 255?</p> <p><u>Answer:</u></p> <p>SF 254 must be on file and is to be utilized in all A-E selections. FAR makes the use of the SF 255 mandatory for projects estimated to exceed the simplified acquisition threshold, and optional for projects under the threshold. All others must be publicly announced in the CBD, with a mandatory provision that both forms be submitted.</p>	
	<p>Review of SF254 & SF255.</p> <p>Tell students to turn to page 2-16 in their Text/Reference and follow along as you go over these two forms in detail. This is important for success in doing Exercise 3.6 Slate and Select.</p> <p>Note to the Instructor:</p> <p>Don't just read the forms. Highlight more important blocks, especially those needed for subsequent exercises.</p>	<p>Forms are not reproduced for IG. Use copies in T/R.</p>

FAR
36.702
(b)(2)

TR 2-16
to 2-28

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>"Suppose you have been tasked to do market research on a requirement that has arrived in your office requesting design services. The contracting officer has requested that you provide a recommendation as to the extent of competition you might expect to receive, etc."</p>	
	<p align="center">Classroom Exercise CE-2.3</p> <p align="center">"The Art of Performing Market Research"</p>	
	<p>Time: 45 minutes to prepare 20 minutes to present</p> <p>Method: Group exercise</p>	
	<p>Instructions for Students:</p> <p>Have students turn to their <u>Classroom Exercise Book, CE-2.3, "The Art of Performing Market Research"</u> Tell the groups to read the scenario and answer the 5 questions on the Analysis form provided. Tell students to use pages 2-14 thru 2-28 in the T/R as Reference.</p> <p>Assign each group a question for presentation. (If there are 4 groups, assign Questions #1 and #2 to the first group.)</p> <p align="center"><u>SCENARIO</u></p> <p>Design services are required for the building of a one story small maintenance facility.</p> <p>The contract amount is estimated to be just under \$25,000. It will require demolition of a small existing building, including removing the foundation. (The building was built in 1926.)</p> <p>Design of the new storage facility consists of providing a two part building; on one side an office, and the other side a maintenance garage facility featuring a mounted overhead crane and hydraulic rack. The building will be rectangular and consist of concrete blocks and red tile roof with windows in the office portion only.</p> <p>Unfortunately an Indefinite Quantity Contract is not available for use, as it has not yet been awarded for the year.</p>	

CLASSROOM EXERCISE CE-2.3

"THE ART OF PERFORMING MARKET RESEARCH

Analysis Form

1. Using the SF 254, determine the appropriate code for this project. _____

2. Explain how you would determine if there are sufficient numbers of A-E firms who are expected to be interested and would qualify for this procurement.

3. Calculate from the information provided the estimated cost of construction (ECC).

4. In examining the SF 254s on hand, what kind of information are you going to look for that will assure you that the contractor has the experience and expertise to perform?

5. Do you recommend that SF 255s be obtained?

Explain why.



INSTRUCTOR'S KEY TO THE EXERCISE


Classroom Exercise CE-2.3



"The Art of Performing Market Research"

- 1. 1. Using the SF 254, determine the appropriate code for this project.**
 - 039
- 2. Explain how you would determine if there are sufficient numbers of A-E firms who are expected to be interested and would qualify for this procurement.**
 - Review all SF 254s on file.
 - Contact Small Business representative.
 - Examine past procurement histories on similar projects.
 - Scan Electronic Bulletin Board
- 3. Calculate from the information provided the estimated cost of construction (ECC)**
 - \$250,000 which is based on 10%. This is an acceptable rule of thumb means of measurement within the A-E community.
- 4. In examining the SF 254s on hand, what kind of information are you going to look for that will assure you that the contractor has the experience and expertise to perform?**
 - Look for in-house capabilities, asbestos removal experience, and crane installation experience.
- 5. Do you recommend that SF 255s be obtained?**
 - Yes.
 - Because the SF 254s do not provide enough information for you to pinpoint the qualifications and expertise of the firms especially related to safety with overhead crane installation and asbestos removal.

NOTE TO INSTRUCTOR: COMPLETE ANALYSIS IS CONTAINED ON THE FOLLOWING PAGES.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p align="center">Instructor's Key to Classroom Exercise CE-2.3 for Guided Discussion (Continued)</p>	
	<p>Since the example presented is a small project, (Contract amount is under \$25,000) it is not required that you have a SF 255 on hand. If the requirement is such that you would not feel comfortable without having more specific information concerning the firm's capabilities, you may request that a SF 255 be provided.</p>	
	<p>Question #3: Some will answer by saying that \$25,000 is 6% of the ECC (or about <u>\$416,000</u>) <u>which is a wrong answer</u> because not all A/E costs are attributed directly to the design (surveys, borings, attendance at meetings, as-builts, interior design, etc). The \$25,000 is the total cost of the A-E contract, which includes design costs, as well as other than design costs.</p> <p>On a rule of thumb basis, a \$25,000 A-E contract for professional design services would represent an ECC (Estimated Cost of Construction) of \$250,000. (Roughly calculated by using <u>rule of thumb of 10%</u>.)</p>	
	<p>Question #4: What <u>in-house capabilities</u> does the contractor offer? This is important on a small dollar value contract because the 6% design fee restriction, may precludes an A-E firm from obtaining consultants by subcontract. Therefore the A-E should have in-house capabilities in order to do a design on a small dollar value contract.</p>	<p>Note: Do not spend a lot of time on 6% issue. Tell students this subject will be covered in detail on Thursday.</p> <p>Note: This is why it is advantageous to have an Indefinite Quantity Contract in place in order to obtain design services for these small projects.)</p>

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p data-bbox="397 283 1015 409" style="text-align: center;">Instructor's Key to Classroom Exercise CE-2.3 for Guided Discussion (Continued)</p> <p data-bbox="332 472 1079 976">The answer is subjective. However, if you re-examine the 039 category listed on the SF 254, (Garages, Vehicle Maintenance Facilities and Parking Decks) you will find that, not only does it list vehicle maintenance facility, but it also applies to "<u>parking decks</u>". This means that paving contractors will often select this category as being descriptive of their services. These type firms would most likely NOT have experience in building maintenance facilities, installing overhead cranes, or asbestos removal. This clearly points out what was said earlier.</p> <ul data-bbox="332 1018 1079 1354" style="list-style-type: none"> • Going only by code numbers will not always provide the information needed to assess contractor's capabilities. • There may be a need to require SF 255s to be submitted in order to clearly determine what the market has to offer in the way of competition for this particular project. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>When reviewing SF 254s in your files, what else must you look for in terms of sources?</p> <p><u>Answer:</u></p> <p>We need to determine how many qualified A-E's are available in the following categories, who have the expertise to perform design requirements for a particular procurement:</p> <ul style="list-style-type: none"> • A-E's in the 8(a) program. • Small Emerging Businesses • Small Businesses <p><u>Under the Competitiveness Demonstration Program, all A-E requirements less than \$50,000 are to be set aside for Emerging Small Businesses.</u></p>	
	<p>Review the Emerging Small Business definition with the class by showing and going over the following viewgraph:</p>	<p>NOTE: As published in the Federal Register by OFPP on September 13, 1991.</p>

EMERGING SMALL BUSINESS

FAR 19.1002

"A small business concern whose size is no greater than 50% of the numerical size standard applicable to the Standard Industrial Classification (SIC) code assigned to a contracting opportunity."

VG 2-2



Ask a member of the class to describe the "Small Business Competitiveness Demonstration Program". After allowing sufficient time to respond in their own words, show the following viewgraph:

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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COMPETITIVENESS DEMONSTRATION PROGRAM

FAR 19.1003

PURPOSE:

- "Test the ability of small businesses to compete successfully in certain industry categories without competition being restricted by the use of small business set asides."
- "Measure the extent to which awards are made to a new category of small businesses known as Emerging Small Businesses."

A-E IS ONE OF THE DESIGNATED INDUSTRIES

VG 2-3

The Act is applicable to SIC codes:

8711	Engineering Services
8712	A-E Services
8713	Surveying



Tell the students

The Competitiveness Demonstration Program has been extended through September 20, 1996.

NOTE: You must check your agency policy for participating details.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 300 272 380" data-label="Image"> </div>	<p data-bbox="331 300 488 338"><u>Question:</u></p> <p data-bbox="331 388 1078 552">In conclusion, the market research you have conducted thus far would lead you to make what recommendations to the Contracting Officer concerning the hypothetical design requirement?</p> <p data-bbox="331 598 467 636"><u>Answer:</u></p> <ul data-bbox="331 682 1078 1060" style="list-style-type: none"> <li data-bbox="331 682 1078 762">• The project should be synopsized and SF 255's requested. <li data-bbox="331 808 1078 1060">• Some idea as to the number of Emerging Small Businesses or 8(a)s who would qualify and may be interested in performing must be obtained by examining previous records. Your recommendation would be based on the information obtained as a result of the survey. 	

TOPIC: 2.4 CHOOSE CONTRACT TYPE

Ref: Text/Reference Book, Pages 2-30 through 2-34

Objective: Upon completion of this lesson topic, students should be able to select the appropriate contract vehicle for professional design of a project, and provide rationale for the selection.

Time: 1:30 - 2:00

Method: Lecture, Discussions, Viewgraph

LESSON PLAN

2.4 CHOOSE CONTRACT TYPE

Introduction:



The last major task to consider in order to prepare an Acquisition Plan is the selection of a contract type. This lesson is designed to provide limited discussion on types of contracts. [Prerequisite courses have covered the various types of contracts.] Therefore, most of the time will be devoted to discussions of the fixed-price contract and other considerations which specifically pertain to A-E contracts, such as Indefinite Quantity contracts, phasing, and options.



Tell the Students:

"Do not confuse the "methods" of contracting which were discussed in Chapter 1, with "types" of contracts."

Most of our A-E professional design contracts are of the fixed-price type variety, although this should not be construed as meaning that you should always only consider the fixed-price variety. Cost Plus Fixed-Fee contracts are also used in A-E procurements.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>In addition, <u>Cost-Reimbursement contracts are widely used in A-E contracting in the environmental services area.</u> This is because the environmental projects contain too many uncertainties, especially in the identification stage. These uncertainties do not permit costs to be estimated with sufficient accuracy to use any type of fixed price contract.</p> <p>Just as in any other type procurement, risk is the determinate factor. When the risk is minimal, or can be predicted with an acceptable degree of certainty, a firm fixed price contract is preferred. However, as the uncertainties become more significant, other fixed price or cost type contracts should be employed to accommodate those uncertainties and to avoid placing too great a cost risk on the architect or engineer.</p>	
	<p>Tell the students:</p> <p>"To begin with, let's take a look at what FAR says concerning criteria for selection of a fixed priced contract." Turn to page 2-31 in the T/R for the criteria listed at FAR 16.202-2(a thru d).</p>	
	<p><u>Question directed at the class:</u></p> <p>Regarding Criteria (a), do we have adequate price competition in A-E procurements?</p> <p><u>Answer:</u></p> <p>Price competition does not exist in A-E contracts. It is forbidden by law. Therefore the criteria listed in Criteria (a) does not apply to this type of contract. However, even if price competition is not present, a firm-fixed price contract may still be appropriate if any one of the rest of the criteria listed is present. If none of the conditions exist, the use of a contract type with contingency provisions or special incentive provisions should be considered.</p>	



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"> </div>	<p><u>Question directed at the class:</u></p> <p>What about Criteria (b) ? Can we compare prices with previous procurements of like services?</p> <p><u>Answer:</u> We can compare prices, but not on a competitive basis. We must obtain valid cost and pricing data to support the reasonableness of prices. Therefore criteria (b) is applicable.</p>	
<div data-bbox="191 751 272 835" data-label="Image"> </div>	<p><u>Question directed at the class:</u></p> <p>Criteria (c) concerns specifically the information which may be available to us concerning cost and pricing data. Does the data available permit realistic estimates to be made to establish probable performance costs?</p> <p><u>Answer:</u> The requirements of this provision are fulfilled in A-E procurements because:</p> <ul style="list-style-type: none"> • Manhour rates are auditable. • Overhead rates are auditable. • Travel costs can be verified. <p>Although manhour costs are judgmental, they are subject to negotiations, and can be compared with the Government estimate prepared by professional engineers, and to similar projects. Rates used in the Government estimate are based on Civil Service pay scales. Therefore, the intent of criteria (c) is considered to be met.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question directed at the class:</u></p> <p>How about Criteria (d) on performance uncertainties?</p> <p><u>Answer:</u> Criteria (d) concerns the information available to us from the cost and pricing data. Does the data available permit realistic estimates to be made to establish probable performance costs?</p> <p>The scope of work prepared for an A-E project design, whether it be new construction or rehab type work, clearly identifies the Government's requirements, including detailed specifications, design guides, the applicable codes, etc. The contractor is invited to perform a site visit, and to examine all of the available data in possession of the Government regarding the conditions at the site. Most likely another site visit will be performed by the A-E prior to, or during, preparations of its proposal.</p> <p>Therefore, most of the performance uncertainties should be identified by the Government and the A-E, allowing the use of a fixed-price contract.</p>	
<div style="border: 1px solid black; padding: 2px; display: inline-block; font-size: 2em;">?</div>	<p><u>Question:</u></p> <p>Why does the Government prefer the fixed-priced contract?</p> <p><u>Answer:</u> Show viewgraph 2-4 after students have responded to the question.</p>	



FIXED PRICE A-E CONTRACT PREFERRED



- **PROVIDES MAXIMUM INCENTIVE FOR A-E TO CONTROL COSTS.**
- **MOTIVATES THE A-E TO PERFORM EFFICIENTLY.**
- **MINIMIZES ADMINISTRATIVE BURDEN UPON CONTRACTING PARTIES.**




VG 2-4



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>One of the most popular types of contracts used in A-E contracting is the Indefinite Quantity contract, sometimes called "Term Contracts" by the various agencies.</p>	
	<p>Question: As a review, ask the students to describe the Indefinite Quantity (IQ) contract.</p> <p>Answer: There are three basic <u>kinds</u> of IQ contracts.</p> <ul style="list-style-type: none"> • Definite quantity, indefinite delivery • Requirements, and • Indefinite quantity. <p>The <u>purpose</u> of the IQ contract is the quick awarding of design contracts for small reoccurring construction or repair projects, of the same type and general nature, which are to be performed in the same general locality. THE IQ CONTRACT IS NOT TO BE USED FOR WORK WHERE WIDE VARIATION IN TASKS USING MULTIPLE DISCIPLINES MAY BE EXPECTED.</p>	Refer Students to Appendix B in their T/R for more detailed discussion of IQ contracts.
	<p>Question: Ask the class: "Why shouldn't we award a contract where a wide variation in tasks may be expected?"</p> <p>Answer: BECAUSE THERE IS NO ASSURANCE THAT THE CONTRACTOR WOULD BE THE MOST QUALIFIED FIRM FOR ALL OF THE TASKS IN SUCH A SITUATION.</p> <p>If the Government calls for a wide variety of tasks to be performed, then the prime A-E firm must subcontract a significant portion of the anticipated work to consultants who may not be identified during the slate/selection/negotiation processes, making the appropriateness of this contracting vehicle questionable.</p>	



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>A firm is selected based on anticipated work for a one year period:</p> <ul style="list-style-type: none"> • Provides flexibility in both quantity and delivery scheduling. • Saves time by eliminating the selection process on each requirement. (Even the short selection process on small orders takes time) • Saves time in negotiating the requirement because of forward pricing. • Allows the Government to provide quick response on small urgent projects. • Saves time by being less of a burden to administer. • Cost effective. 	
<div data-bbox="190 848 272 926" data-label="Image"></div>	<p><u>Question:</u> For review purposes, ask students to describe the typical A-E Indefinite Quantity contract. Keep track of the answers to be sure that all of the aspects listed are included in the discussion.</p> <p><u>Answer:</u> The IQ contract is a firm fixed-price agreement that specifies cost data that will be used by both the Government and the A-E in pricing future orders issued under the contract:.</p> <ul style="list-style-type: none"> • Negotiated wage rates and/or salaries. • Audited overhead rates. • Accumulative value of the contract may not exceed that specified in the contract. • Individual orders must not exceed a specified amount.(dollar threshold amounts for both are established by the agencies). • Minimum to be ordered amount is also specified, and if not ordered during the contract period, the Government will pay the contractor for the minimum, even though no orders were placed. 	



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Note: Funds for the minimum amount are obligated at the time of contract award.</p> <ul style="list-style-type: none"> • Regarding MINIMAL amount, <ul style="list-style-type: none"> - it must be more than a nominal amount. - Contains a MAXIMUM amount to be ordered. • Regarding MAXIMUM amount, <ul style="list-style-type: none"> – Maximum amount must be realistic and based on the most current information available. <p>Other criteria:</p> <ul style="list-style-type: none"> • <u>Funds</u> for other than the minimal amount are obligated at the time each delivery order is issued. • <u>Scope of work</u> under the IQ contract is narrow enough to include only certain specified disciplines, and a specific area or perimeter for performance is identified. • Each <u>delivery order</u> issued under the contract constitutes a contract. • The contract is good for <u>one year, with up to two option years</u> possible, depending on the contracting officer and agency policy. 	
	<p>Tell the students:</p> <p>If an option is to be included in the IQ contract,</p> <p>THE SYNOPSIS MUST INCLUDE A STATEMENT THAT AN OPTION WILL BE INCLUDED. FAILURE TO INCLUDE NOTICE OF THE OPTION IN THE CBD COULD BE FATAL TO YOUR ABILITY TO EXERCISE IT WHEN THE TIME COMES.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>What are the mechanics of issuing an award under an IQ contract? Ask one of the students to explain the process of issuing a delivery order against an IQ contract.</p> <p><u>Answer:</u></p> <p>The procedures in issuing a delivery order do not differ significantly from that of issuing any other A-E contract, except the A-E selection has been made, a synopsis is not required, and certain costs have been pre-determined.</p>	
	<p>List the following steps showing the events leading up to issuing a delivery order for the students on the blackboard:</p> <ul style="list-style-type: none"> • Government identifies a need. • Scope of work is prepared. • Funds are obtained. • RFQ is issued stating services required, and desired time of completion. • Government estimate is prepared. • Quotation (proposal) is received. • Negotiation objectives are established and achieved. • Fee and time of completion is negotiated. • PNM is executed and approvals obtained. • Delivery order is executed. <p>Upon completion of <u>each delivery order</u>, a <u>performance evaluation</u> must be made. At the end of the contract period all evaluations on delivery orders issued will be consolidated into one performance evaluation for the IQ contract, utilizing the SF 1493.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>What about the 6% statutory fee limitation? Does it apply to each delivery order, or does it apply to the total amount of all orders placed under the contract?</p> <p><u>Answer:</u></p> <p>The 6% fee limitation applies to each and every order. Why? Because the law says that the design fee shall not exceed 6% of the estimated cost of construction (ECC) of THE PROJECT.</p>	
	<p><u>Question:</u></p> <p>Incrementation is forbidden in an IQ contract, as well as all other contracts. What is meant by incrementation?</p> <p><u>Answer:</u></p> <p>Incrementation is often referred to as "splitting" an order. Since the IQ contract has dollar limitations on its use, splitting an order to comply with the dollar limitation is not allowed:</p> <ul style="list-style-type: none"> • Placing one delivery order for concept only, then issuing another order on the same project for design, etc. • Splitting repair projects up into segments on the same project in order to stay within the dollar thresholds allowed. 	
	<p style="text-align: center;">OPTIONS</p> <p>Tell the class:</p> <p>It was mentioned earlier that the Indefinite Quantity contract often contains an option year for services to be provided.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 268 272 346"></div> <div data-bbox="191 415 276 483">FAR 17.201</div> <div data-bbox="191 814 272 892"></div>	<p><u>Question:</u> Ask one of the students to describe an option.</p> <p><u>Answer:</u> An option is a unilateral right of the Government to obtain additional services called for by the contract, or to extend the term of the contract. Depending on agency policy, it usually is necessary for the contracting officer to justify the inclusion of an option, and if used, must:</p> <ul style="list-style-type: none"> • Be included in the synopsis. • Clearly be specified in the contract when awarded, and • Be prepriced. 	
	<p><u>NOTE:</u> An option is always exercised as a unilateral modification. An option can only be exercised within the terms and conditions established for it by the basic contract. Any attempts to modify the terms of the option, even if only to identify the option items more clearly, could void the option entirely.</p>	
	<p>Prior to the exercise of an option, the contracting officer must:</p> <ul style="list-style-type: none"> • Issue a notice of intent to exercise the option within the time frame provided for in the contract, and • Prepare documentation addressing: <ul style="list-style-type: none"> - Contractor's performance level; - Whether a new solicitation would result in a firm with better technical qualifications or an equally qualified firm at a better price; - Whether exercise of the option would place undue hardship on the contractor; - If exercise of the option is in the Government's best interest. - Whether the option will be exercised according to the terms and conditions of the basic contract; and, - If the services are still required. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>Use of options <u>and/or phases</u> in architect and engineering contracts AT THE TIME OF AWARD is sometimes confusing. Ask if anyone in the class can describe the difference between options and phasing?</p> <p><u>Answer:</u></p> <p>The definition of an option has already been discussed. Options can be used in IQ contracts in order to</p> <ul style="list-style-type: none"> • <u>extend</u> the contract period. • <u>include</u> pre-priced options at the time of negotiation for additional services, such as the ability to obtain design services for the repair of Building X, Wing B, after the contractor's satisfactory design for repair of Building X, Wing A. • <u>order</u> the contractor to progress from 35% design to 100% design, provided that there is sufficient scope of work to price the additional services at the time that you make the award. 	
	<p>PHASES, on the other hand, are used in situations in which <u>pre-pricing is not feasible</u>. Also, phases do not require a Determination & Findings for execution.</p> <p><u>For example</u>, some situations may require a firm to perform a preliminary assessment as the initial phase. Then, based on the results of the assessment, the contracting officer may negotiate for the completed design services. Therefore the 2nd phase is not priced at the time of award.</p> <p>Proceeding with subsequent phases would be accomplished by modification pursuant to the Changes clause. BUT REMEMBER, ALL WORK COVERED UNDER THE PHASES MUST BE DESCRIBED IN THE CBD SYNOPSIS, as well as a description as to how the phases will be contracted for.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>IN SUMMARY: If additional services can be reasonably <u>priced</u>, USE OPTION PROCEDURES.</p> <p>If the additional services <u>cannot be pre-priced</u> reasonably priced, USE PHASES.</p> <p>However, before proceeding with the award of phased work, remember that the firm's performance for the initial contract work MUST BE CONSIDERED. No award for phased work should be made if the firm's initial performance is less than satisfactory.</p>	
	<p>Tell the students:</p> <p>Do not let the discussion concerning options and phasing get confused with other prepriced services which are negotiated initially, i.e.</p> <ul style="list-style-type: none"> • Additional services, such as extra man-days for field consultant services during construction, or • Soil borings, etc. <p>The need for these would be initiated by a unilateral modification pursuant to the Changes clause.</p>	

TOPIC: 2.5 DEVELOP ACQUISITION PLANS & MILESTONES



Ref: Text/Reference Book, Pages 2-34 through 2-36


Objective: Upon completion of this lesson students should be able to update or prepare an A-E acquisition plan.



Time: 2:00 - 2:15
2:15 - 3:45 Exercise 2.5 and Break
3:45 - 4:30 Questions and Reading


Method: Classroom Exercise

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	2.5 DEVELOP ACQUISITION PLANS & MILESTONES	
	<p>Introduction:</p> <p>The subject of acquisition planning is not new. Students have studied the requirements for an acquisition plan, and the importance of it in the prerequisite contract courses. After a <u>brief review</u> discussion of the particular concerns of forming an acquisition plan as it pertains to A-E services, students will do an <u>exercise</u> which allows them to prepare an acquisition plan based on a given scenario.</p>	
	<p> Question:</p> <p>Ask students to describe an acquisition plan, as opposed to a procurement plan?</p> <p>Answer:</p> <p><u>Acquisition planning</u> is the process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency's need in a timely manner and at a reasonable cost. It includes developing the overall strategy for managing the acquisition.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Procurement planning</u> concerns only the procurement phase, which should be a PART of the acquisition plan. It is a plan to "pick up the ball and run with it, because it is the contract specialist's turn to "run with the ball". It should involve such strategy as "how are we going to get from here to there" within the milestones established?, etc.</p> <p>The FAR states that acquisition plans are required, but leaves the rest up to the agencies. Therefore, during this discussion, you will find that even though acquisition planning is quite similar between one agency and another, there will be some distinct differences in policies.</p> <p><u>For example</u>, some agencies require that a brief written acquisition plan be executed for each delivery order executed under an IQ. contract. Other agencies have no such policy.</p> <p>Agency guidance covers:</p> <ul style="list-style-type: none"> • Dollar thresholds. • Identification of those responsible for the plan. • Timing for submission and review. • Established milestones. • Other details. 	<p>NOTE TO INSTRUCTOR:</p> <p>Encourage students to interact during the discussion, explaining the policies of their agencies regarding policies in acquisition planning.</p>
	<p>Tell the students:</p> <p>Throughout the first two lessons we have been discussing various aspects of A-E acquisition planning. Thus far we have discussed:</p> <ul style="list-style-type: none"> • Brooks Act procedure in particular. • Methods of contracting. • Whether to perform design in-house or by contract. • Types of contracts. • Procedures that can be used (Options, Phases) <p>In order to assist in making the proper planning decisions, we have also discussed:</p> <ul style="list-style-type: none"> • Market surveys. • Social programs that apply, and number of firms available to perform in the various categories. • A-E Performance appraisals (past history). 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>One of the most important aspects of an acquisition plan is the establishment of <u>milestones</u>. This is a difficult task, and one which requires the combined effort of the entire team. When all members are present to contribute, a brainstorming session of team members is an excellent way to establish these important dates.</p> <p>Tell the class that they are going to be provided an opportunity to do some "acquisition planning brainstorming" with an exercise entitled: "ACQUISITION PLAN FOR LEAKYPOND, U.S.A."</p>	
	<p style="text-align: center;">CLASSROOM EXERCISE CE-2.5</p> <p style="text-align: center;">ACQUISITION PLAN FOR LEAKYPOND U.S.A.</p> <p style="text-align: center;">Case Study</p> <p>Time: 60 Minutes for Preparation 30 Minutes for Presentation</p> <p>Method: Group Exercise</p> <p>Instruction: Students are to break into groups and read the scenario titled "Leakypond, USA". From the scenario, students are to prepare an acquisition plan based on the facts presented.</p> <p>1. A sample acquisition plan outline is provided for their convenience. The sample provides simple explanations of the information required and blanks for the students to use in providing their responses.</p> <p>2. In addition, students are to establish milestones for the various phases of the acquisition cycle, using column 4 from the form in Class Exercise 2.2.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>They have already determined the amount of time it takes to complete each step. Now they must:</p> <ul style="list-style-type: none"> • determine which activities overlap in whole or in part, • select those activities which can be considered “major” milestones, and • settle on dates for each milestone. <p>Students are to be told that the procurement situation presented is one in which an Indefinite Quantity contract is not a consideration in establishing the time frames.</p>	
	<p>Tell the students:</p> <p>Group # 3 (See Class Exercise 2.2) will make presentation for Section A; and Group #4 will make presentation for Section B.</p> <p>The instructor will hold an interactive discussion with each group to obtain differences in the decisions of the various groups and the rationale used.</p>	

Classroom Exercise CE-2.5

ACQUISITION PLAN "LEAKYPOND USA"

Time: 60 Minutes for Preparation
30 Minutes for Presentation

Method: **Group**

Instruction:

Break into groups and read the scenario entitled "Leakypond USA"

From the scenario information provided, develop an acquisition plan using the sample acquisition plan outline provided. The sample provides simple explanations of the information required and blanks for providing responses.

In Section B, #7, you are to establish milestones for the various phases of the acquisition cycle, using column 4 from the form in Class Exercise 2.2. You have already determined the amount of time it takes to complete each activity. Now you must determine:

- which activities overlap in whole or in part,
- select those activities which can be considered “major” milestones, and
- settle on dates for each milestone.

The procurement situation presented is one in which an Indefinite Quantity contract is not a consideration.

Classroom Exercise CE-2.5

"TROUBLE AT LEAKYPOND USA"

Leakypond, California has been discharging hazardous wastes into a lagoon for the past 20 years. They were notified by the State, through their landlord, GSA, in April 20, 1992 that testing had revealed significant contamination was taking place and given an ultimatum to clean it up "or else". First, they are required to take action to define the problem they have caused and then take corrective action to cease contamination. Various Government agencies have been working with the owner of the property (GSA) for the last year helping them try to define their response. Mr. Dunn is the contact person at Leakypond.

Mr. Moore, the GSA Project Manager for the cleanup, states that detailed studies of the subsurface geology and the ground water conditions at the hazardous waste lagoon are necessary to meet the requirements of how to approach the cleanup. The study must define the nature, rate and extent of the contamination and evaluate the alternatives available to eliminate or mitigate the effects of the lagoon on ground water. The study must also provide an engineering report and a recommended course of action. The preparation of a Statement of Work for the selected remedial action alternative may also be required. It cannot be determined whether this will be necessary until after the study is made.

The design division for GSA is currently understaffed, but qualified private sector engineers are available to make the study. If the design is done in-house it would receive the same priority as the other priority requirements being worked on "in-house". Because of interference with special requirements at Leakypond, all required field work in conjunction with the studies to be performed must be completed by May, 1993. Worse yet, the State of California has notified Leakypond that they must complete the studies and initiate corrective action by the end of calendar year 1993, or they will be required to close the part of the operation that generates the waste.

Mr. McGrath, the Contracting Officer in the contracts office at GSA states that they, too, are overworked and understaffed. He would like to defer any procurement actions until after the 1st of the fiscal year (FY 94). He also reported that GSA has a severe shortage of funds this year, and the Comptroller can only find \$600,000 (at the most) to get the project started. The estimated cost which the Government has come up with is \$450,000 for the initial study, but the total project, including cleanup, will probably run about \$200,000 more, for a total of \$650,000. These costs are considered bare minimums.

There must be coordination between the State, Federal Government, Leakypond GSA and the contractor to keep this project on track. The State and Federal Government must also be given the opportunity to review and approve the work plans and interim reports. According to Dan Singles, who is head of the Engineering Department at the GSA there is a considerable amount of data available concerning the extent of the contamination in the area, and the overall geology of the general area is well understood by both the State and Federal Government. However, some specific subsurface geological information is not available.

A survey of the SF 254's on hand shows a limited number of firms who would qualify to do this highly specialized work. There is one GSA Indefinite Quantity contract currently in existence that covers studies of this type, but the dollar value exceeds the maximum allowed for any one project.

Classroom Exercise CE-2.5
FORMAT FOR THE ACQUISITION PLAN
"LEAKYPOND USA"

[NOTE: Acquisition plans are required for all acquisitions with an estimated total value of greater than \$100,000. The following format, an example used by one agency, is actually designed for use for acquisitions with a total estimated value greater than \$10,000]

=====

COVER SHEET. The cover of the acquisition plan shall identify the plan, the program it supports, the general nature and location of the work. It shall also be dated (Use October 1, 1992), and have the signatures of responsible officials in each of the elements who have significant involvement in the preparation of an acquisition plan.

=====

A. ACQUISITION BACKGROUND AND OBJECTIVES:

1. Statement of Need _____

a. Background. (Relevant facts which lead up to the acquisition in question; other projects or work which is germane to this effort or other information which would be helpful in understanding the purpose or intent of this effort.)

b. Objectives. (This should be a concise statement of the need that the acquisition will fulfill.)

c. Source of Requirement. (Who is the customer?)

2. Applicable Conditions

a. Constraints or Limitations. (Note any limitations on time, funds, manpower, etc. or other facts which limit alternatives.)

b. Schedule Drivers. (When must the work start and/or finish to meet project objectives, and are there any important intermediate milestones? Give any tentative, desired or required milestones, if known.)

3. Estimated Costs. (Initially only order of magnitude, refined as possible. If known, the approximate costs of in-house, contract or other costs may be shown.)

4. Performance Objectives. (What are the criteria against which we will judge the effectiveness of the effort?)

5. Period of Performance. (How long do we have to complete the job or how long do we think it will take to complete the work?)

6. Special Reporting Requirements. (Are special or interim reports or meetings with the customer or others (e.g., EPA) required?)

7. Government Furnished Information, Equipment or Assistance (Will any significant information, equipment or assistance be provided to the contractor to the extent that this will affect the schedule or price of the task?)

B. PLAN OF ACTION

1. Proposed Acquisition Source. (In-house, contractor, small business, 8(a) set aside, supplemental agreement).

2. Competition. (Will this be a competitive or non-competitive procurement as defined in the FAR?)

☐ Yes ☐ No

3. What type of selection procedures? (Sealed Bidding, Brooks Bill, Negotiations, Source Selection, etc.)

4. What method of A-E contracting will be used? (Traditional, CM, Design-Build, etc.)

5. Proposed Contract Type.

6. Budgeting and Funding. Are funds available?

☐ Yes ☐ No

7. Acquisition Milestones. (Use Column 4 of form in Class Exercise 2.2.)

C. POINT OF CONTACT (list names, with telephone numbers).

1. Contracting Officer, Program Manager, technical branch project engineers, contract specialist, budget analyst and others as needed.

2. Customer contacts

INSTRUCTOR'S KEY TO CE-2.5

EXAMPLE

ACQUISITION PLAN FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY AT LEAKYPOND, U.S.A.

October 1992

A: ACQUISITION BACKGROUND AND OBJECTIVES:

1. Statement of Need:

- a. Background: Leakypond, USA, has been discharging hazardous wastes to a lagoon for the past 20 years. GSA, who owns the property, has been ordered to take action to define the problem, and identify actions to fix the situation. Various Government agencies have been working with GSA for the past year trying to help them define their response. However, they have been unable to identify the problems with any certainty.
- b. Objectives: Although information on general geology is available, detailed study of the subsurface geology and ground water conditions at the hazardous waste lagoon is necessary to meet the Federal and State requirements for this lagoon. The study must define the nature, rate and extent of contamination from the lagoon, and evaluate the alternatives available to eliminate or mitigate the effects of the lagoon on ground water. The study must also provide an engineering report and a recommended course of action. Optional services will include preparation of a Statement of Work for the selected remedial action alternative.
- c. Source of Requirement: GSA Headquarters has sent the requirement to Leakypond by message dated 092601Z OCT 92, subject: Leakypond Lagoon Contamination. Included in the message is a high priority to be used.

2. Applicable Conditions:

- a. Constraints or Limitations: The State Environmental agency has notified Leakypond that they must complete the studies by the end of 1993, or they will be required to close that part of the plant that generates the waste. GSA has a severe shortage of funds for the current year, and can only find \$600,000 to start the effort this year.
 - b. Schedule Drivers: The report must be completed by 31 Dec 93. Field work must be completed by the end of MAY 93 in order to avoid interference with special requirements at Leakypond, and to meet the deadline established by the State.
3. Estimated Costs: Current rough estimate is that \$450,000 will be needed for initial effort, but the total project will run about \$650,000.
4. Performance Objectives: The study must be accomplished within the requirements of current EPA rules and procedures; the final report must be acceptable to the State and it must be completed within schedule.

5. Period of Performance: The study should take about 12 months to complete. However, due to the deadlines established by EPA, it will have to be completed in six months.
6. Special Reporting Requirements: Initial and in-progress meetings between the State, GSA, and Leakypond personnel, will be necessary to keep the effort on track. The State must be given the opportunity to review and approve the work plans and interim reports.
7. Government Furnished Information, Equipment and Assistance: There will be considerable amount of data available concerning the extent of the contamination. Preliminary studies by other Government agencies have generated a great deal of data. Also the geo-logy of the area is well understood. All information will be made available to the A-E.

B. PLAN OF ACTION:

1. Proposed Acquisition Source: Due to the current heavy workload being experienced by the Government, in-house performance is not being considered.

Synopsis waiver due to urgency will not be requested pursuant to FAR 6.302-2, but everything will be done to expedite the procedure.
2. Competition: Yes.
3. Type of Selection: Brooks Bill procedures will be used. The option requires the preparation of plans and specs which must, by law, be certified by a registered professional engineer.
4. Proposed Method: Traditional, using urgent procedures whenever possible.
5. Proposed Contract Type: Firm Fixed Price.
6. Budgeting and Funding: GSA has indicated that funds have been allocated and that they will be transferred to GSA field division by the time of initiating the procurement of services. Although the amount will be short of the total estimated project, it will be sufficient to award the initial study, and if the option is exercised, sufficient funds will be made available at that time.
7. Acquisition Milestones: See column 4 of Instructor's Key form in Class Exercise 2.2. Major milestones have been marked with an "X." These are subjective, of course, but represent a minimum. Dates are not provided, but students must reflect impact of overlapping activities in deriving their dates.

C. POINTS OF CONTACT:

1. GSA Field Division:
Contracting Officer
Program Manager
Design/Construction
2. Customer Contacts:
Leakypond

ADDITIONAL COMMENTS FOR DISCUSSION:

CONCERNING URGENCY:

It was established early in the scenario that urgency was a driving force. By consulting FAR regarding urgency circumstances, it permits other than full and open competition if the requirement is unusual and of compelling urgency. In other words, the Government would be seriously injured unless the agency is permitted to limit the number of sources from which it solicits bids or proposals. The regulation provides that the delay in award of a contract would result in serious injury, financial or otherwise, to the Government.

CBD:

In order to successfully justify its use, the Government must be able to demonstrate that the time lost in making a public announcement and the associated selection process would so delay the proposed project that compliance with congressional acts or mandates cannot be met. In an A-E situation, it would have to be demonstrated that any delays experienced during the design phase would have a ripple effect and ultimately prevent the Government from achieving its assigned mission.

LOSS:

Although the decision is subjective, waiving the synopsis requirement due to urgency would not be considered in this case. While it is true that the Government's plant at Leakypond could be shut down if the deadlines are not met, the requirement would not be in the same classification as a project needed as a result of total disaster, such as a hurricane. Chances are that an extension of the closure could be granted by the State if it could be established that the Government is diligently pursuing resolution.

Other ways to save time:

Waiver of audit if over \$500,000. (Estimate is \$450,000)

Good contract management.

CONCERNING THE OPTION:

Recall that in the discussion on options and phasing, an option is considered an option when it can be prepriced. If it cannot be prepriced, then it is considered phasing. In the instant case, it is fairly certain that preparation of the plans and specs could be prepriced.

THE WRAP UP

In conclusion of the lesson, the instructor will ask the students, one at a time, to answer the questions presented at the end of the scenario at the beginning of the chapter.

This is the time that the instructor must be sure that the information which has been covered has been understood by all students. It also is a good time for reinforcement of material already covered. The review of the scenario questions is necessary for learning reinforcement and an opening for all questions to be presented for discussions.

The questions addressed in the scenario, Lesson Two were as follows:

- 1) What services are considered professional?
- 2) How are sources identified?
- 3) Who are the key players?

The answers to the questions are covered in the Text/Reference on the last page of each chapter, but included on the next page for the instructor's convenience in guiding the discussions.

Sarah is Out of Luck!!

Done properly, the acquisition plan will serve as an effective management tool; ensuring the procurement meets the agency's needs in a timely manner, at a reasonable cost and with maximum competition.

Looking back to the beginning of the chapter we were given a scenario where a professional craftsman was required. The question we were left with was; what services are considered "professional"?

After studying this chapter it is plain to see that even though there are many types of professionals providing, a wide range of services, the Brooks Act applies only to services of an Architectural or Engineering nature. In the opening scenario the craftsman required could indeed be considered a professional, but not one whose services are covered by the Brooks Act. The guidelines for determining if the Brooks Act applies are well defined. Contracting Officers must use this guidance when confronted with a situation where a service is required which is incidental to some part of the A-E services. These are classified as other incidental services which are of an architectural or engineering nature.

Once we determined that the Brooks Act procedures apply we saw the need to develop a plan to ensure the acquisition is fully successful. The acquisition plan identifies who is responsible for various actions and establishes milestones to be met during the procurement. Details about the decision to keep the project in-house or contract out, the contract type, and if small business concerns can be utilized will also be covered. When all these things are done properly the procurement has every chance for success.

LESSON PLAN
SELECTION PROCESS
CHAPTER 3

TIME	LESSON	OBJECTIVES
8:00 - 8:15	3.0 Introduction	
8:15 - 8:50	3.1 Develop a Detailed Scope of Work	Include all information which is needed in the synopsis.
8:50 - 9:10	3.2 Develop Synopsis Scope of Work	Include information which gives all parties a clear understanding of work to be done.
9:10 - 9:25	3.3 Develop Specific Selection Criteria	Critique selection criteria for appropriateness and compliance with regulations.
9:25 - 9:40	3.4 Publish in the CBD	
9:40 - 10:00	B R E A K	
10:00 - 11:15	Exercise 3.4	
11:15 - 11:25	3.5 Receive and Process Responses	
11:25 - 12:00	3.6 Explain Evaluation Board Procedures	<ul style="list-style-type: none"> • Establishing evaluation boards • Explaining ranking procedures
12:00 - 1:00	L U N C H	
1:00 - 1:10	3.7 Selection Authority Makes Final Decision	
1:10 - 1:20	3.8 Short Selection Procedures	
1:20 - 3:40	Exercise 3.8 and Break	
3:40 - 4:30	Questions & Reading	

LESSON PLAN
SELECTION PROCESS

LESSON TOPIC GUIDE

FEDERAL ACQUISITION INSTITUTE

TOPIC: 3.0 THE SELECTION PROCESS


Ref: Text/Reference, Pages 3-1 and 3-4

Objective: Perform all the tasks required in association with the selection of an A-E in accordance with Brooks Act procedures and FAR requirements.

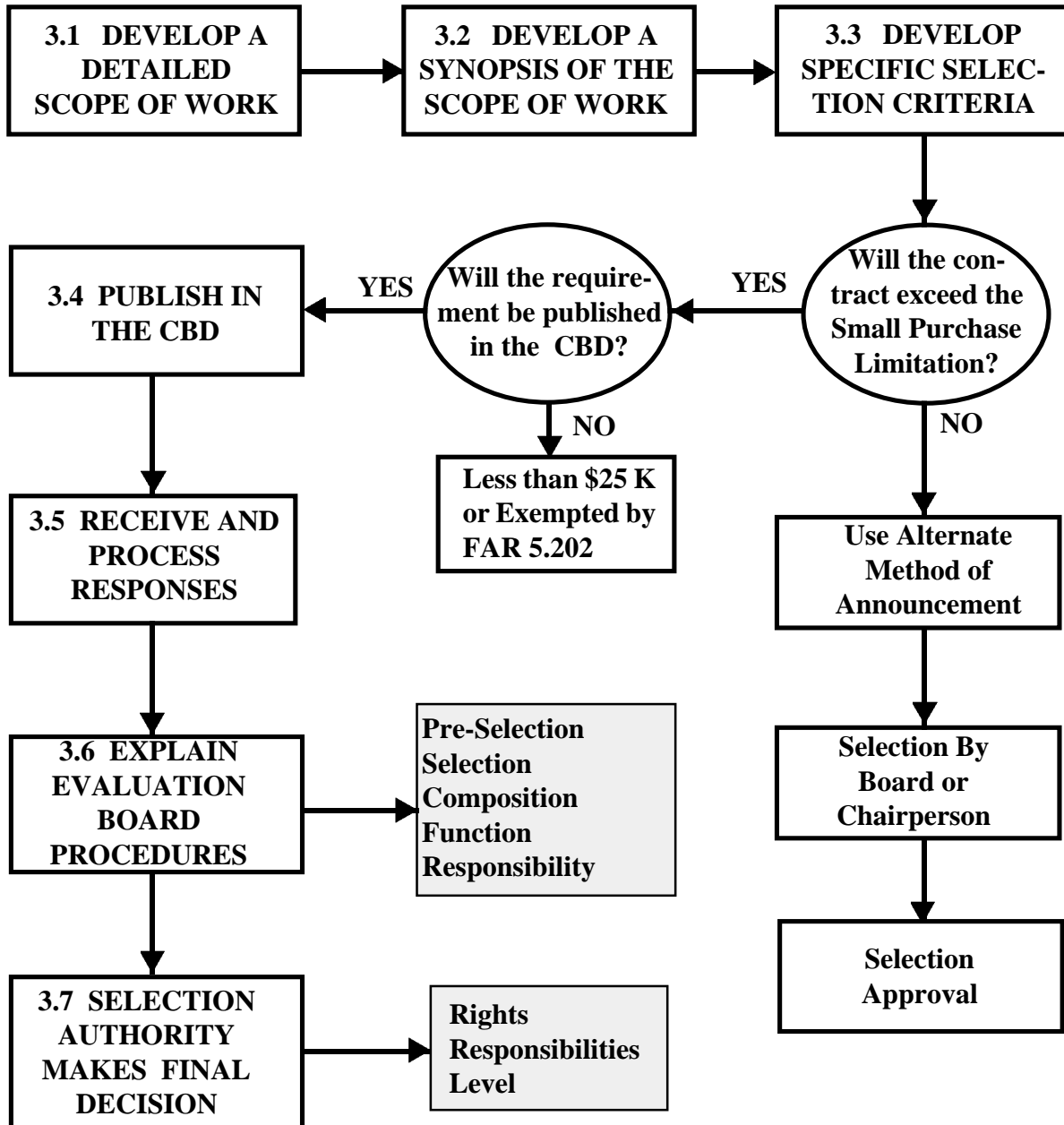
Time: 8:00 - 8:15

Method: Lecture, Flowchart

LESSON PLAN



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Inquire if there were any questions concerning the lesson of the day before, and take a few minutes for discussion if there seems to be any topics that need clarification.</p> <p style="text-align: center;">Introduction</p> <p>Tell the students: This chapter goes to the heart of the A-E contracting process by discussing, step-by-step, the procedures to be followed in the actual selection of an A-E. The lesson begins with a discussion of the scope of work and concludes with a slate selection exercise.</p> <p>Go through the flowchart with the students explaining briefly each of the enabling objectives. Follow the flowchart review by informing the students that they will prepare a CBD notice for a cafeteria project; and in the afternoon they will review the SF 254s and 255s submitted in response to the CBD notice.</p> <p>Note to Instructor: Refer students to vignette on page 1 of this chapter and ask them: What issues does Laura want her employees to note during their training?</p>	<ol style="list-style-type: none"> 1. Do Brooks Act procedures promote favoritism? 2. Does the Brooks Act promote full and open competition? 3. Do Brooks Act procedures promote full and open competition?


THE SELECTION PROCESS





TOPIC: 3.1 DEVELOP A DETAILED SCOPE OF WORK**Ref:** Text/Reference Page 3-5 to 3-12**Objective:** Develop a detailed scope of work, including all information which shall be included in the synopsis, followed by selecting an A-E to perform in accordance with the Brooks Act.**Time:** 8:15 - 8:50**Method:** Discussion, Lecture, Viewgraphs

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>When referring to "scope" of an A-E contract, you may hear it referred to several different ways, i.e., "scope of work," "scope of services," "statement of work (services)," etc. All have the same meaning.</p> <p>However, do not confuse "scope of A-E services" with that of construction project scope, or that of the overall project scope (which includes both the A-E and construction scope).</p>	
	<p><u>Question:</u></p> <p>What is meant, then, by "Scope of Work", or "Scope of Services" in the case of an A-E contract?</p>	
	<p><u>Answer:</u></p> <p>A Scope of services can mean non-physical boundaries; those defining the design effort and submittals we need as a part of a professional contract to design a project or prepare a study of some sort. This is the A-E scope, or Statement of Services to be performed. It must convey the intent of the design project. AS A MINIMUM IT SHOULD INCLUDE:</p> <ul style="list-style-type: none">• Description of the facility to be designed,• Criteria to be utilized in the design, and• Description of the requisite developmental stages that are involved in doing the design.	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>It must be written in clear, concise, proper English to be enforceable. It must also describe tasks that can be effectively measured. It must not leave "loop-holes" in interpretation.</p>	
	<p>Discuss with the class some of the following examples of "loop-holes" that should be avoided.</p> <p><u>Examples:</u></p> <p>(1) Never ask for a study to be prepared to "professional standards." Instead, describe the elements of work which we expect the A-E to perform and products we expect from its work.</p> <p>(2) A common pitfall in expressing and defining work tasks, is using the words "assist, as required," "as necessary," and "as directed." These words, or combination of them should not be used in technical scopes because:</p> <ul style="list-style-type: none"> • "Assist": Assist connotes personal services. It infers working side-by-side, being subject to supervision. The word is undefined as to the identification of the work and its range and depth to be performed. • "As required": The application of this approach is a work condition undefined. It has no expressed limitations. It places the procuring agency in a position of not expressing its minimal needs. Its use could lead to a debatable condition as to compliance with the contract. • "As applicable" and "as necessary." This leaves an unsettled question as to the minimal needs. The scope must state what the exact requirements are. • "As directed": This condition, as part of a work task in a scope of work, connotes a personal services situation. The question "directed by whom" is the result. <p>(3) The word "support" must be avoided. This is considered a general expression of need, but absent an explanation of what is considered "support," the term is ambiguous.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Question: Why is so much emphasis placed on scope?</p> <p>Answer: Since the scope of services becomes the standard by which the Government measures performance, it becomes the baseline document from which all aspects of changes and interpretation are bounced against. A well written scope should describe the elements of work which we expect the A-E to perform, and the products we expect to result from its work.</p> <p> A well written scope establishes 5 essential elements: Show Viewgraph 3-1. The instructor must explain each element as detailed following the viewgraph.</p> <p>Allow the viewgraph to remain on the screen during the discussion which follows:</p>	

FIVE ELEMENTS IN THE SCOPE OF A-E SERVICES

1. Intent of Contract
2. Project Description
3. Estimated Cost of Construction
4. Schedule of Submittals
5. Special Considerations

VG 3-1

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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INSTRUCTOR'S EXPLANATION OF VIEWGRAPH

(Includes information for discussion, as well as questions and answers for class interaction.)

1. INTENT OF THE CONTRACT

Describe the specific types of professional services required (disciplines)

- Plans and specifications production (design product).
- Cost estimating.
- Describe whether construction contract will be issued as a sealed bid, turnkey, two step, etc.
- Studies.
- Planning services.

Provide a general statement that design services shall be in accordance with applicable documents and standards, then list the applicable documents, i.e., (ASK THE STUDENTS TO NAME SOME OF THEM)

- A-E Guide.
- Architecture Plan (if any).
- EPA standards.
- Master Plan.
- Handicapped Standards.
- Historical Preservation Requirements.
- Archaeological Preservation Requirements.
- Agency specific documents.
- Whether the plans and specifications are to be in metric.

If an Indefinite Quantity contract is to be issued, a statement should be made about services to be performed for a specific period, and if an additional period (option) is contemplated.

2. PROJECT DESCRIPTION

- Provide a brief description of the type of facility, type of construction and approximate quantities required for design and construction.
- Carefully balance the project scope against the A-E design contract scope. Do not exceed authorized project scope in design contract scope.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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INSTRUCTOR'S EXPLANATION OF VIEWGRAPH

(Includes information for discussion, as well as questions and answers for class interaction.)
(Continued)

3. ESTIMATED COST OF CONSTRUCTION (ECC)

Question:

Ask the students why the ECC is important other than giving the A-E a "good idea" of the magnitude?

Answer:

(These costs are extremely important because of the 6% design fee limitation).

- a. The estimated cost of construction on larger projects such as MILCON projects (DOD), OR "Prospectus Projects", (GSA), is established from the project's budget cost, minus any contingencies, G&A etc.
- b. For Special Projects, or ones considered minor in nature, the ECC is established by the design/engineering personnel as a rule.
- c. If there is value (cost) for Government furnished equipment, the cost should be revealed.

Tell the students: Remember that each requirement for production of a set of plans and specifications needs an ECC. This is important to remember on multiple project indefinite delivery scopes. Each project ordered on an indefinite quantity contract requires its own 6% design fee calculation.

4. SCHEDULE OF SUBMITTALS

- a. Schedule for submittals must be established in the scope. Based on the project criteria, the client's requirements and individual agency policy, separate the design process into the distinct submittal levels.

For example, submittals may be required at 35%, 65%, 95% and 100% design stages.

Also, the number of copies of the specifications and drawings to be reproduced, types of estimates required, and any special studies performed should be estimated for the various submittals.

- b. **The number of copies of submittals to be distributed, and to whom, i.e.**

- 1) Client.
- 2) In-house.
- 3) Others.

- c. All time constraints must be explicit in the A-E scope of services because these affect the A-E's fee, such as the urgency of the project.



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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INSTRUCTOR'S EXPLANATION OF VIEWGRAPH

(Includes information for discussion, as well as questions and answers for class interaction.)
(Continued)

5. SPECIAL CONSIDERATIONS:

- a. The first thing to establish is a statement of the extent of design to which the Government intends to negotiate, or award, as an initial contract item, or as an option. This statement should address audit requirements if applicable.
- b. A statement concerning how the contract is to be administered.
- c. The furnishing of design criteria. Let the A-E know whether subsurface information and/or topographic surveys are to be furnished by the Government. In some instances it may be necessary to furnish preliminary information on foundations and/or pavement designs, etc.
- d. Here is where all special requirements should be listed. Remember that each additional task that will be included in the scope increases the A-E's fee.
- f. If the contract is an indefinite quantity contract with an option to extend, the clauses must be included in the contract and a statement to that effect needs to be included in the scope of services.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Remind the class:</p> <p>The degree of completeness and quality achieved in preparing the scope of work goes a long way in determining how well the A-E can develop the fee proposal, and in turn, how much smoother negotiations will proceed.</p>	
	<p><u>Question:</u></p> <p>Indefinite Quantity (Term Contract) scopes differ slightly. Ask the students in what way do they differ?</p> <p><u>Answer:</u></p> <p>All project scopes must be within the limits defined in the basic contract. They must be of certain skills for a particular designated location, and must be within the perimeters expressed in the scope of services which can be found in the basic contract.</p> <p>There is a <u>Rule of Thumb</u> to determine when a project falls within the scope of services in an indefinite quantity contract situation:</p> <p style="padding-left: 40px;">If the A-E must go outside its own firm and hire subcontractors to perform the majority of the work, the project is not within the scope of the Indefinite Quantity SOW.</p> <p>(If outside of scope, the contractor may not be the most qualified firm, in which case, the project should be advertised.)</p>	

TOPIC: 3.2 DEVELOP SYNOPSIS SCOPE OF WORK


Ref. Text/Reference Pages 3-13 through 3-15



Objective Upon completion of this lesson topic, the student should be able to develop a synopsis of a given project which will provide both parties a clear understanding of the work to be ordered.



Time: 8:50 - 9:10

Method: Discussions, Lecture

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>While it may be true that technical skills are required in order to prepare a statement of work or services or scope for an A-E synopsis, the <u>contract specialist is responsible for</u></p> <p>reviewing the work statement for ambiguities, conflicting requirements, and extraneous or unnecessary items.</p> <p>The description of work must be clear to anyone reading it, as opposed to only technical persons being able to understand its meaning.</p> <p>Since the scope of work to be published in the synopsis establishes all of the boundaries, every word is important. <u>If the scope of work published in the synopsis changes, the synopsis process will have to be started all over again.</u> If not, assurances cannot be made that the most qualified A-E will be selected. Therefore, the integrity of the A-E selection process is at stake.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>As a minimum, the CBD synopsis must include the features that describe the project. Ask the class to name as many of the features as they can:</p> <p><u>Answer:</u></p> <p>Their responses should include the following:</p> <ul style="list-style-type: none"> • Type of facility. • Size of the facility. • Unique facility functions/features. • Architectural features <ul style="list-style-type: none"> Historic renovation requirements Interior design requirements • Any specialized design required for: <ul style="list-style-type: none"> Foundations Utilities HVAC Solar Other • Any environmental issues to be addressed: <ul style="list-style-type: none"> Asbestos Storm water management Hazardous wastes 	
	<p>Tell the students:</p> <p>Shortly we are going to do an exercise on writing a synopsis. But first, refer students to the example synopsis in the Classroom Exercise Book (Exhibit 3-5 on page 3-15 of the T/R.)</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u></p> <p>When reading a synopsis, what criteria will we be looking for on which to judge whether or not it meets all of the FAR criteria?</p> <p><u>Answer:</u></p> <p>Critical elements of an A-E synopsis:</p> <ol style="list-style-type: none"> 1. Complete description of services. 2. Start - finish date. 3. Location, cost range, type of contract, set-aside. 4. List of evaluation factors. 5. Any special qualifications. 	
	<p>Further explanations:</p> <ol style="list-style-type: none"> 1. Per <u>FAR 5.207(c)(1)</u>, “a clear and concise description of the ... services that is not unnecessarily restrictive of competition and will allow a prospective [A-E] to make an informed business judgment as to whether [the project falls within its expertise.]” <p>The trick is to give just enough information, but without too much detail.</p>	
	<p><i>Example:</i> If the A-E is to perform an <u>analysis</u>, the task must say precisely</p> <ul style="list-style-type: none"> • what is to be analyzed, together with the • criteria for performing the analysis, including any particular elements to be considered. • If some conclusion is to be drawn as a result of the analysis, the Government should describe briefly what it needs to obtain as a result of the analytical work. • If it is important as to how, or in what sequence the analysis is to be conducted, then it should be outlined. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p data-bbox="331 300 1075 380">If you are the synopsis reviewer ask yourself these questions concerning the description:</p> <ul data-bbox="331 426 1075 821" style="list-style-type: none"> <li data-bbox="331 426 1075 464">• Is the description of work perfectly clear? <li data-bbox="331 489 1075 611">• Does it describe the submittal requirements, as to exactly when, number of copies, and distribution to whom? <li data-bbox="331 636 1075 674">• Does it appear restrictive in any way? <li data-bbox="331 699 1075 821">• Exactly what are we requiring? Plans and specifications, post construction award services, as-builts, studies, etc.? <p data-bbox="331 905 1075 1064">2. Another critical element is the requirement to list a start and a finish date. This will permit the A-E to evaluate its workload and determine if resources will be available.</p> <p data-bbox="331 1115 1075 1236">3. <u>Brief</u> information as to location, cost range and limitations, type of contract, and any applicable set asides.</p> <p data-bbox="331 1287 1075 1367">4. List of evaluation factors sequenced <u>in order of importance</u>. (descending order).</p>	

TOPIC: 3.3 DEVELOP SPECIFIC SELECTION CRITERIA



Ref. Text/Reference Pages 3-16 through 3-20

Objective Upon completion of this lesson topic, the student should be able to critique specific selection criteria for appropriateness and compliance with FAR.

Time: 9:10 - 9:25

Method: Discussion, Lecture

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	FAR specifies seven selection criteria to be used by agencies in evaluating each potential A-E for award. (See Exhibit 3-6 on page 3-16 of the T/R.) They are incorporated by reference into the CBD. The criteria are identified by a statement in the synopsis such as "See note 24" which is used as a space saving measure.	
	<p><u>Question:</u> How does the A-E know what Note 24 says?</p> <p><u>Answer:</u> In each Monday's addition of the CBD, all of the numbered notes that are referenced in the agency generated text are printed on the back pages. (Note 24, among other things, reprints the text of FAR 36.602-1 entitled "Selection Criteria".)</p>	
	<p>Tell the students:</p> <p>Refer students to Exhibit 3-7 on page 3-18 of the T/R and go over each one of the 7 elements.</p> <p>Ask the students to describe as many as they can. Emphasize that the criteria should be listed in relative order of importance in the CBD. Assigned weights or numerical factors are used by some agencies; and not allowed in others. Poll the students regarding their agency policy.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Each element is individually tailored for the particular project being advertised.</p> <p>1. Types of personnel required:</p> <p>The criterion will usually be addressed by a statement such as: "Only firms demonstrating expertise in the disciplines of architecture, mechanical, electrical, structural, civil, and environmental engineering need apply for consideration."</p> <p>2. Specialized experience/ technical competence:</p> <p>This is probably the most important element, because the decision is ultimately subjective as to the evaluation of the A-E firm's specialized experience and technical competence, versus some other firm's specialized experience and technical competence. How the A-E responds to this is critical. Sufficient specific information must be provided in order for the Government to make an assessment.</p> <p>3. The capacity of the A-E firm to accomplish the work in the required timeframe:</p> <p>This information is usually demonstrated in past performance.</p> <p>4. Past performance on contracts in terms of cost control, quality of work and compliance with performance schedules:</p> <p>Federal, state and local contracts and contracts with private firms.</p> <p>5. General geographical location, demonstrating the A-E's knowledge of local conditions:</p> <p>This may, or may not, apply.</p> <p>6. Use of recovered materials and achieving waste reduction and energy efficiency:</p> <p>This is a new criterion added by FAC 90-27.</p> <p>7. Acceptability of any other appropriate evaluation criteria:</p> <p>This covers any evaluation factors not defined under the other criteria listed.</p>	

TOPIC: 3.4 PUBLISH IN THE CBD



Ref: Text/Reference Pages 3-21 through 3-23

Objective: Upon completion of this lesson topic, the student should be able to publish a requirement for an A-E contract in accordance with FAR criteria.


Time: 9:25 - 9:40
9:40 - 10:00 Break
10:00 - 11:15 Exercise 3.4

Method: Discussion, Lecture

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	If the total contract value is expected to exceed \$25,000, the contract must be synopsisized and announced in the Commerce Business Daily, unless one of the exemptions in FAR 5.202 applies. At least thirty days must be allowed from the date of publication of a proper notice of intent to contract for A-E services.	
 FAR 5.205(d)	<p><u>Question:</u> What about contracts for lesser fees than \$25,000?</p> <p><u>Answer:</u> Contracts for lesser fees may be publicized in the CBD, or by notices at the contracting office or elsewhere in accordance with FAR. Notices must be posted for public review for 10 days and should contain all of the information required by FAR 5.207.</p> <p>If the synopsis concerns an Indefinite Quantity contract, an initial project may be included in the award. If so, it should be described along with a general description of any other services that might be ordered under the contract.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"></div> <p data-bbox="191 478 272 541">FAR 5.002</p>	<p data-bbox="332 300 495 342"><u>Question:</u></p> <p data-bbox="332 342 1076 426">Why does FAR require that A-E services be publicized?</p> <p data-bbox="332 468 479 510"><u>Answer:</u></p> <p data-bbox="332 510 982 573">FAR requires that contracting officers publicize contract actions to:</p> <ul data-bbox="332 573 1076 636" style="list-style-type: none"> • Increase competition. • Assist small business concerns, SDBs, and LSA concerns. <p data-bbox="332 657 1076 730">The FAR further identifies the CBD as the primary means in which contracts are publicized.</p>	
<div data-bbox="191 793 272 877" data-label="Image"></div>	<p data-bbox="332 804 495 846"><u>Question:</u></p> <p data-bbox="332 877 1076 961">There are other means of publicizing however. Ask the students to name some of them.</p> <p data-bbox="332 1003 495 1045"><u>Answers:</u></p> <ul data-bbox="381 1077 933 1224" style="list-style-type: none"> • Bulletin boards. • Periodic handouts, • Through local trade associations. • Brief announcements in newspapers. <p data-bbox="332 1255 1076 1329">Each synopsis should be concluded with a statement similar to the following:</p> <p data-bbox="381 1360 1031 1539">"A-E firms which meet the requirements described in this announcement are invited to submit a completed SF 254 (unless already on file), and a SF 255, U. S. Government Architect-Engineer Qualifications, to the office shown below:"</p> <p data-bbox="332 1570 812 1602">Followed by another statement, i.e.</p> <p data-bbox="381 1633 1031 1812">"Only firms responding to this announcement by xx/xx/xx will be considered. Firms having a current SF 254 on file with this office may also be considered. See Note 24. This is not a request for proposal."</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p align="center">Class Exercise CE-3.4</p> <p>Drafting a Commerce Business Daily Synopsis</p>	
	<p>Method: Group Exercise - PART I</p> <p>Time: 15 minutes for group work. 10 minutes for presentations</p> <p>Purpose: The purpose of this exercise is to reinforce learning of the elements of a good A-E synopsis, concentrating on the information that is essential.</p> <p>Instruction: Students are to find the example of the synopsis which is provided in their Class Exercise book under CE 3.4, Part I. They are to</p> <ol style="list-style-type: none"> 1. read the synopsis, 2. identify any deficiencies, and 3. be prepared to discuss whether, in their opinion, it is a good example or not. <p>Instructor will use their comments as a teaching tool in relating what constitutes "a good synopsis", using information that has just been discussed in the lesson.</p>	
	<p>After the students have read the synopsis ask the following questions:</p> <p><u>Question (1)</u> Does this example resemble a real synopsis in appearance?</p> <p><u>Answer:</u> No. A real synopsis is in narrative form with no distinguishing paragraphs, and no paragraph headings as shown in the example. It is limited to 3 1/2 pages in length.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question (2)</u> Is this an example of a good synopsis? On a scale of 1-10, ask how this would rank?</p> <p><u>Answer:</u> No. On a scale of 10 this would probably rank somewhere in the neighborhood of 5 or 6. Why?</p> <p><u>Question (3)</u> Are there any discrepancies, omissions in it? Describe.</p> <p><u>Answer:</u> (a) There appears to be too many unrelated disciplines involved here for an Indefinite Quantity contract. This particular synopsis lists the following disciplines:</p> <ul style="list-style-type: none"> • Storm weather drainage systems. • Erosion control measures. • Roads and Parking lots. • Topo surveys. • Evaluation of asbestos materials and toxic waste <p>Recall that disciplines must be limited in order to assure that you can determine the most qualified firm. Too many unrelated disciplines indicate that an indefinite quantity contract should not be issued.</p> <p>It is primarily up to the contracts office to guide the technical branch in this regard. Therefore, in this case the technical people should be consulted and the number of disciplines clarified and narrowed.</p> <p>(b) In addition, the criteria for evaluation states that the firm will be evaluated on the “general” geographic area of the contract, but does not state how or what they are going to judge as being a general geographic area.</p>	

CLASSROOM EXERCISE CE-3.4

PART I

EXAMPLE: CBD ANNOUNCEMENT

1. **R** (Sources Sought)
2. **Date** (MMDD)
3. **Yr.**
4. **FIPS number** (Fed. Information Processing Standard)
5. **Zip Code** of Contracting Office
6. **C** (Classification Code)
7. **Contracting Office Address.**
8. **C-Indefinite Quantity Contract for Civil Design and Engineering Services for projects in the state of Florida. (Type of Contract)**
9. **Proposed contract number.**
10. **Opening/Response Date** N/A.
11. **Contact Point/Contracting Officer, Including name and Phone No.**
12. **Contract Award Number** N/A
13. **Award Dollar Amount.** N/A
14. **Contract Line Item Number.** N/A
15. **Contract Award Date.** N/A
16. **Contractor's Name.** N/A
17. **DESCRIPTION.** (Enter a clear and concise description of the action. The description may not exceed 12,000 textual characters (Approximately 3 1/2 single spaced pages).

CLEAR, CONCISE DESCRIPTION OF SERVICES

Architect-Engineer or Engineering Services are required for preparation of plans, specifications, cost estimates, related studies, and all associated engineering services for several projects under an indefinite quantity contract. There is likely to be a wide variation in the complexity and size of the civil design projects issued under this contract as delivery orders. However, no single delivery order will exceed \$300,000 in total fees. The duration of the contract will be for one (1) year from the date of an initial contract award. The proposed contract includes a Government option for the same terms and conditions of the original contract for a period of an additional one (1) year. A maximum of \$500,000 in delivery order fees are possible during each 12 month period of the contract not to exceed \$1,000,000 for the entire contract. Design services will include:

- (A) Replace/Upgrade deteriorated sanitary lines, potable water lines and storm water drainage systems;
- (B) Security fencing;
- (C) Installation and/or repair of shoreline erosion control measures;
- (D) Roads and parking lots, new and resurfacing;
- (E) Perform property and topographic surveys;
- (F) Evaluation and definition of asbestos materials and toxic waste disposition may be required. Subsequent preparation of plans and specifications may require definition of the removal and/or disposal process. Firms responding to this announcement must be prepared to accept the aforementioned as part of their contract responsibility;
- (G) Government will reserve an option to negotiate construction inspection services and the preparation of Operating and Maintenance Support Information;
- (H) Landscaping renovation.

EVALUATION FACTORS


A-E firms responding to this announcement will be evaluated on the above requirements based on the following criteria in relative order of importance:

- (1) Professional qualifications necessary for satisfactory performance of required services;
- (2) Specialized experience and technical competence in the type of work required of the proposed engineering/technical staff who will perform the work;
- (3) Capacity to accomplish the work in the required time frame;
- (4) Past performance on contracts with Government agencies and private industry in terms of cost control, quality of work and compliance with performance schedules;
- (5) Location of the firm in the general geographic area of the contract provided that application of this criterion leaves an appropriate number of qualified firms, given the nature and size of the contract;
- (6) Use of recovered materials and achieving waste reduction and energy efficiency;
- (7) Aggressive internal quality control program with demonstrated results of reducing design errors and/or omissions;
- (8) Volume of work awarded during the last 12 month period.

GENERAL INFORMATION, INCLUDING SUBMISSION OF FORMS

The initial order for work will include cutting, patching paved areas and restoration of landscaping. No other general notification to firms for other similar projects performed under this contract will be made.

Type of contract: Firm Fixed Price. Estimated start date is _____. Those firms which meet the requirements described in this announcement and wish to be considered must submit a SF 255. One copy of the SF 255 is to be received in this office no later than the 30th calendar day after the date of appearance of this announcement in the CBD. Should the due date fall on a weekend or holiday, the SF 255 will be due the first workday thereafter. If a current SF 254 is not already on file with this office, it must be submitted with the SF 255. The SF 255 must clearly indicate the office location where the work will be performed and the qualification of the individuals and subcontractors proposed to work on the contract and their geographical location.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Following the discussion the students are to write their own synopsis (Item 17 only) based on the information contained in <u>Part II</u> of Exercise CE 3.4 in their Class Exercise book.	
	<p style="text-align: center;">Class Exercise CE-3.4</p> <p style="text-align: center;">Drafting a Commerce Business Daily Synopsis</p>	
	<p>Method: Group Exercise - PART II</p> <p>Time: 35 minutes for group work. 15 minutes for presentations</p> <p>Instruction: Students are to read the following:</p> <ul style="list-style-type: none"> • “Things to remember” list • NASA project request memo • Purchase Request • Response memo <p>and then prepare Item 17 for a CBD Synopsis using the outline provided.</p> <p>Have each group make presentation on one of the four parts of the outline.</p> <p>NOTE: There is no right or wrong answer, but be prepared to respond to the issues enumerated in the memos as they are addressed by the students.</p>	

CLASSROOM EXERCISE CE-3.4

PART II

THINGS TO REMEMBER IN COMPLETING THE EXERCISE

- The purpose of the synopsis is to alert A-E firms of the Government's requirements. The description of the project should give prospective firms enough information to decide if they are interested or capable of doing the work.
- The trick is to give enough information, but without TOO much detail. It is a synopsis, not a detailed scope of work.
- The exercise does not involve Items 1 through 16 in the synopsis format. Those items are coded information items which are explained in FAR 5.207. We are concerned with the information that goes into Item 17 of the synopsis only.
- Exactly what are we requiring? Plans and specifications. Post Construction Award Services, As-builts, Studies, etc.?
- In describing the project, give the type of building you want, i.e., commissary, cafeteria, etc., give the approximate square footage. What are the design parameters? Describe the type of construction material. What about fire protection, etc.?
- We do not provide the estimated cost of construction in the synopsis. Give a cost range such as provided for in FAR 36.204. Those ranges are:
 - a) Less than \$25,000.
 - b) Between \$25,000 and \$100,000.
 - c) Between \$100,000 and \$250,000.
 - d) Between \$250,000 and \$500,000.
 - e) Between \$500,000 and \$1,000,000.
 - f) Between \$1,000,000 and \$5,000,000.
 - g) Between \$5,000,000 and \$10,000,000.
 - h) More than \$10,000,000.
- Type of Contract contemplated: A-E contracts for design project are normally Firm-fixed-price. However, remember that type of contract is negotiable.
- Give the starting and completion dates.
- All significant evaluation factors must be set forth, including their relative importance to one another. This is usually accomplished by stating "All firms responding to this announcement will be evaluated on the following factors, which are shown in descending order of importance." Sometimes two factors may be equally important. If that is the case, you must give that information to the firms. (See Exhibit 3-6 in the text/reference.) However, you may add to those factors any specific criteria your project requires and you may rearrange those factors to place them in the order of importance for your project.
- For ease of presentation, create your synopsis in bullet format rather than narrative (as it must appear in the CBD).

CLASSROOM EXERCISE CE-3.4

**NASA
Resale and Services Support Office
Pasadena, CA 91109**

From: Director, Resale and Services Support Office
NASA Residence Office, Pasadena, CA 91109

To: Director of Engineering
Kennedy Space Center, FL

Subj: CAFETERIA SERVICE TEST PROGRAM

1. The cafeteria project has been chosen as a test case by the Cafeteria Test Program. In the past the design and construction of cafeterias has been somewhat uniform. The main reason for this appears to be the tendency to select and contract with A-E firms who have experience in the design of cafeteria type eating facilities. The GAO has recently questioned this practice due to the comparatively high cost of cafeterias compared to several large fast food businesses surveyed. There has also been wide spread dissatisfaction voiced through the Resale System Feedback Program, concerning aesthetic qualities, flow patterns, convenience and comfort. Subsequently we have started this test program to evaluate new systems which enhance customer satisfaction and answer GAO concerns.
2. For the above stated reasons, it is requested that you ensure A-E services for the Space Center cafeteria are procured from a firm which has commercial food service/fast food design experience.
3. Your assistance in this matter is greatly appreciated. If there is any further information required please do not hesitate to contact my office.

Sincerely,

CLASSROOM EXERCISE CE-3.4

1. COMPONENT	FY19XX CONSTRUCTION PROJECT DATA		2. DATE FY 1993	
3. INSTALLATION AND LOCATION NASA		4. PROJECT TITLE Kennedy Space Center Cafeteria		
5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST	
9. COST ESTIMATES				
ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
Cafeteria	SF	19,500	77.00	1502
Supporting Facilities				379
Electrical Utilities	LS			(65)
Mechanical Utilities	LS			(39)
Parking	SY	5,000	23.00	(115)
Site Improvements	LS			(90)
Demolition	LS			(70)
Subtotal (ECC)				1881
Contingency (5%)				94
Total Contract Cost				1975
Administrative (6%)				119
Total Request				\$2094
10. DESCRIPTION OF PROPOSED CONSTRUCTION				
<p>Steel frame, concrete masonry building with brick faced interior walls. Interior will include vinyl tile floor and carpet as appropriate, gypsum board walls and acoustical ceiling. The structure will be air conditioned, include cold storage area, truck loading bay and protected by fire and security alarms as well as a sprinkler system. Parking capacity for 150 cars. Vacant building on proposed site to be demolished under this project; asbestos removal may be required.</p>				
<p>11. REQUIREMENTS: The existing cafeteria building was constructed in 1943 under war time conditions and with war time materials. Heavy continuous use over the last 50 years, and the inefficient interior configuration makes it impractical to continue maintenance and support of the existing building. A new facility, located contiguous to the NASA office buildings, would be more convenient for workers and will increase the sales volume.</p>				

CLASSROOM EXERCISE CE-3.4

**NASA
Public Works Center**

From: Engineering Director

To: Design Division Director, Kennedy Space Center, FL

Subj: DEMOLITION REQUIREMENT
DESIGN CONSIDERATIONS FOR THE CAFETERIA, KENNEDY SPACE
CENTER, PROJECT P-XXX

1. The existing cafeteria to be demolished is 18,210 square feet. It consists of slab on grade, Quonset hut type construction. The interior is wood frame construction, acoustical ceiling, central air-conditioning and sprayed insulation/fire proofing. From records and visual inspection it could not be determined if asbestos is present in the insulation. The insulation was apparently added in the late 1960's, according to a longtime cafeteria employee. The freezer display cases are old and are estimated to have little or no salvage value. The butcher shop equipment was installed new in January, 1987, and is in good shape. This equipment could possibly be used in the new cafeteria or salvaged for a high value.
2. All utilities are presently on site, however, the exact location and depth of all underground lines is not known. The 4160 kVA feeder runs through the project site but does not appear to be a problem.
3. Again I am taking this opportunity to remind you of the requirement to protect the three large pine trees on the project site. The Environmental Director is adamant that the trees remain undisturbed and undamaged. This concern has been consistently addressed and is plainly identified on the Space Center Architectural Plan.
4. This should provide you enough information. However, if there is any other information you require, it will be provided as soon as possible.

Sincerely,

CLASSROOM EXERCISE CE-3.4

CBD SYNOPSIS

ITEM 17 DESCRIPTION:

1. Scope of A-E Services

-
-
-
-
-

2. Location, Cost, and General Information

-
-
-
-

3. Special Terms

-
-
-
-

4. Evaluation Criteria

-
-
-
-

TOPIC: 3.5 RECEIVE AND PROCESS RESPONSES



Reference: Text/Reference Pages 3-22 through 3-23

Objective: At the conclusion of this lesson, students should be able to receive and process all responses to a CBD announcement.

Time: 11:15 - 11:25

Method: Discussion, Lecture and Viewgraphs

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Tell the class: The procedures to be followed in receiving and processing responses to a CBD announcement vary among agencies. In some of the smaller offices a contract specialist may be responsible. In others it may be delegated to the design department. In any event, the contract specialist must be knowledgeable of the process.	
	Ideally, some sort of filing system shall be in place in either the contracts office or other designated place in order to conform to FAR which requires that: (Show VG 3-2).	Note: T/R coverage is in Exhibit 2-6 on page 2-15.


A-E QUALIFICATIONS DATA FILE

FAR 36.603

"Agencies shall maintain offices or permanent evaluation boards, or arrange to use the offices or boards of other agencies, to receive and maintain data on firms wishing to be considered for Government contracts. . . . [and] shall maintain an A-E qualifications data file."

VG 3-2

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Information to be included in an <u>A-E Qualification File</u> comes from:</p> <ul style="list-style-type: none"> • SF 254 • SF 255 • 1421s • Data base information received from the A-E Contract Administration & Support System. (ACASS). 	
<div data-bbox="191 573 272 653" data-label="Image"></div>	<p><u>Question:</u></p> <p>Ask for a show of hands on how many of the students are familiar with the ACASS data base? Ask one of those responding in the affirmative to explain the system.</p> <p><u>Answer:</u></p> <p>The ACASS is an interactive system maintained by the Corps of Engineers which is located in the North Pacific Division in Portland, Oregon. Firms that submit their qualifications data to the Corps of Engineers are entered on this system and the data reflected on their SF 254s become immediately available to all offices.</p> <p>The information is available to other agencies through in-service agreements. Up until recently the DOD agencies were the only participating agencies. It is currently available to participating civilian agencies such as GSA.</p> <p>By subscribing to the service provided, agencies can obtain performance evaluations recorded in the system, as well as current award information. Within three days of an award of a contract or delivery orders under an Indefinite Quantity Contract, the ACASS system will have the information available, assuring the most current information is issued at all times.</p> <p>The ACASS can be queried from remote terminals with a set of criteria that will overlay just about every data item that you would find on a SF 254. It is programmed to list how many firms presently on file meet any, or all, of the criteria. It can also provide you with the firm's name as well as a completed SF 254.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>The Qualification File should be set up as follows:</p> <p>(Show VG 3-3)</p>	

A-E QUALIFICATIONS DATA FILE CONTENTS

- Firm's Name, Address, and Phone #
- Geographic Area of Consideration
- Specialized Experience
- Professional Capabilities
- Capacity, with respect to SOW that can be Undertaken & Experience in CADD
- Small Business Size Status
 - SDB - 8(a) - Emerging Small Business
- Awards (Contract #, Date, Title, Amount)

VG 3-3

Any firm meeting the requirements for a synopsisized project shall have the Qualification File included in the package for consideration by the Slate/Selection Boards.

TOPIC: 3.6 EXPLAIN EVALUATION BOARD PROCEDURES



Ref: Text/Reference Pages 3-23 to 3-29

Objective: Upon completion of this lesson the student should be able to explain the correct procedures in establishing the evaluation boards as well as the procedures to be followed by the evaluation board in the selecting process.

Time: 11:25 - 12:00
12:00 - 1:00 Lunch

Method: Discussion, Lecture, Viewgraphs



LESSON PLAN



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the class:</p> <p>All of the tasks that we have discussed thus far pertain to our ultimate goal of assuring that the evaluation board(s) identify the most highly qualified A-E firm to provide the services we require.</p> <p>Notice that when discussing evaluation board(s), the plural is used. This is because some agencies use only one board and others employ two. FAR allows agencies to make this determination.</p>	
	<p>Show Viewgraph 3-4.</p>	





**PRESELECTION (or Slate) &
EVALUATION (or Select) BOARDS**




1. Three or more Members.
2. Appointment by Letter.
3. Experience in Construction, A-E, or Acquisition.
4. Can't Serve on both Boards.

VG 3-4

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Explain to the class: (IMPORTANT)</p> <p>Whenever discussing A-E selections under the Brooks Act, you will hear the terms "selection board," "evaluation board," and "selection authority." You may hear references to the "selection board" and "evaluation board" used interchangeability. <u>The FAR refers to them as being ad hoc "evaluation board(s),"</u> (including preselection boards), and later, in discussing them, the term "selection board" is used.</p> <p>For purposes of this instruction they will be referred to as: "preselection boards" (when two boards are utilized), "evaluation board" and "selection authority". When only one board is used they will be referred to as "evaluation board" and the "selection authority."</p>	
	<p><u>Question:</u></p> <p>What type of individuals comprise the preselection and evaluation boards in your agency?</p> <p><u>Answer:</u></p> <p>The boards are composed of senior members who, collectively, have experience in architecture, engineering, construction, and Government related acquisition matters.</p>	
	<p>Some agencies, such as GSA, have what they call the <u>Screening/Slate Selection Board</u> that evaluates the Standard Forms 254's and 255's submitted by the A-E firms in <u>two steps</u>:</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>First, they screen the submissions for basic eligibility.</p> <p>Second, the same panel performs in depth reviews of the firms that passed the screening review.</p> <p>Then selected firms are put on a "short list" for further reviews, with each firm numerically rated in accordance with the published criteria.</p> <p>A different board called the <u>National/Regional Evaluation Board</u> is formed from preselected individuals, usually a chairperson and two members who are professional architects and engineers.</p> <p>This board is convened and detailed reviews and evaluations of the short list firms are conducted.</p> <p>Discussions are held with at least three of the highest rated firms.</p> <p>Board prepares a report on the strengths and weaknesses of each firm and then ranks the firms.</p> <p>It is then passed on to a selection authority.</p>	
	<p>Tell the students:</p> <p>As you can see, the procedures are consistent, but details follow agency policy.</p>	
	<p><u>Question:</u></p> <p>How are the members appointed, and who appoints them?</p> <p><u>Answer:</u></p> <p>Appointment must be in writing. Usually they are appointed by heads of the design/ construction branch. They are selected on the basis of their expert knowledge in particular aspects of the project at hand, as well as their availability. <u>The FAR allows that if authorized by agency procedure, private practitioners of architecture-engineering, or related professions can also serve.</u> However, the chairperson must be a Government member of the board.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> How does one become a chairperson?</p> <p><u>Answer:</u> The answers will be agency specific. By meeting the following qualifications you may be eligible to be appointed a chairperson in most agencies:</p> <ul style="list-style-type: none"> • You must be a licensed professional engineer or architect. • You must have served as a board member on previous boards (agency specific). • You must be knowledgeable in contractual matters. • You must be knowledgeable in negotiation procedures. <p>Some agencies have testing requirements.</p>	
	<p><u>Tell the students:</u> Keep in mind that no firm is eligible for award of an A-E contract during the period in which any of its principals or associates are participating as members of the awarding agency's evaluation board.</p> <p>In those agencies electing to employ two boards, provisions are made for a preselection board. <u>Preselection</u> boards basically follow the same procedures as the evaluation boards. However, agencies differ as to the functions of the preselection board.</p> <p>Ask for a show of hands as to how many of the agencies represented in the class utilize two boards in the selection process?</p>	
	<p><u>Question:</u> Ask one of the students who raised a hand to explain to the class the process in his/her agency.</p> <p>Ask if anyone in the class experiences a different procedure in their agency.</p>	
	<p>Allow time for student interaction.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Explanation:</p> <p>After the class interacts concerning the question, explain the following:</p> <p style="padding-left: 40px;">In some instances the preselection board will compile a list of firms recommended by the board as being highly qualified, no matter how many firms are listed. THIS IS CALLED SLATING.</p> <p>In other instances, agencies may require the preselection board to not only identify the highly qualified firms, but to also reduce the slate to five or six best qualified firms, (should be a minimum of three) but the names are <u>NOT</u> RANKED IN ORDER OF PREFERENCE.</p> <p>In a two board situation the preselection board is also made up of qualified members who collectively have experience in:</p> <ul style="list-style-type: none"> • Architecture • Engineering • Construction, and • Government & related acquisition matters. <p>Although not required by the FAR, some agencies also require evaluation board members to be A-Es licensed by the state(s).</p>	
 	<p><u>Question:</u></p> <p>In those agencies employing the preselection (slate) board and evaluation board, define the functions the preselection board will provide?</p> <p><u>Answer:</u></p> <p>The answer is provided by showing a viewgraph. Explain to the class that although similar, agencies have different policies regarding the functions that the preselection boards are to follow.</p> <p>VG 3-5 covers <u>preselection</u> board functions.</p> <p>VG 3-6 covers <u>evaluation</u> board functions.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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PRESELECTION (SLATE) BOARD FUNCTIONS

1. **Review** all qualified firms based on:
 - 254s/255s
 - Performance evaluations
 - Spreading the work
 - Quality control plans
 - Small Business classification
 - CBD criteria
2. **List** but not rank at least 3 firms.
3. **Prepare** preselection report.

VG 3-5



EVALUATION (SELECT) BOARD FUNCTIONS


FAR 36.602-3

1. **Review** current data files on firms listed in preselection report.
2. **Evaluate and rank** in accordance with CBD criteria.
3. **Hold discussions** with 3 top firms.
4. **Prepare** selection report.

VG 3-6

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 300 272 380" data-label="Image"></div>	<p><u>Question:</u> Ask the students what is meant by "current data" which is mentioned in the <u>1st sentence of VG 3-6</u>?</p> <p><u>Answer:</u> In order to be considered "current", the information used should be <u>less than three years old</u>.</p> <ul style="list-style-type: none"> • Qualifications data listed in the SF 254. • Project specific qualifications contained in the SF 255 of design. • Past performance evaluations on other projects obtained from the SF 1421s or from ACASS. • Dollar amount of previous awards. This will provide an idea of capacity of the firm. <p>The 2nd sentence of VG 3-6 is very important. The boards SHALL use the selection criteria published for the evaluation of each firm. Caution that the selection criteria CANNOT be modified by any board or selection authority, unless re-synopsized.</p>	
<div data-bbox="191 1087 272 1167" data-label="Image"></div>	<p><u>Question:</u> The <u>3rd sentence of VG 3-6</u> states that discussions are held with at least three of the most highly qualified firms. What constitutes "discussion" in this sense?</p> <p><u>Answer:</u> A discussion should be held with each of the most highly qualified applicants detailing concepts and scope of the project. It is beneficial to obtain information concerning alternative approaches to design from the prospective designers. (Remind the students that the preselection board does not hold any discussions whatsoever with any of the applicants).</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Question: Where do the interviews/discussions take place?</p> <p>Answer: At the Government's facility, the A-E's place of business, or sometimes they are held at the chosen site for the project.</p>	
	<p>Tell the students: The <u>4th sentence of VG 3-6</u> states that a minimum of three firms are mandatory in order to consider that valid competition exists.</p> <p>Prebriefing: The evaluation board usually meets ahead of time and it is valuable to receive a briefing by someone, usually the project manager. This allows the board members to ask any questions they may have, and allows members who have not had previous experience serving on a board to become familiar with the procedures.</p> <p>Voting members: The boards must exercise good judgment in all matters; only voting members should be present during the voting procedure. Only voting members and observers specifically identified by the chairperson should be allowed in the rooms during discussions. Information from board actions is not for public consumption.</p> <ol style="list-style-type: none"> 1. Their first task is to become completely familiar with the <u>CBD announcement</u>, extracting carefully all of the evaluation criteria, as well as any weights (if any) to be used. 2. Using their knowledge, the briefing held, and the information contained in the CBD, board members can start reviewing the <u>SF 254's and 255's</u>. Each member should review each firm individually, working independently of each other. Each member will keep notes on his/her findings and rationale of why a firm was rated a certain way. 3. After the process is complete, the members <u>consolidate their findings</u> and proceed to study the information at hand. This usually results in rounds of discussions, and sometimes requires another review of the data before a final decision can be reached as to the top qualified firms. 4. The board then determines how the <u>interviews</u> will be accomplished. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Show Viewgraph 3-7:	

RULES FOR INTERVIEWS

- Follow Agency policy to decide need.
- Give advance notice to all firms.
- Provide instructions to Board members.
- Interview all firms.
- Ensure that all Board members participate.
- Do not discuss price.
- Face to face preferred but can use telephone.

VG 3-7



Warn the students that during discussions or interviews NO ONE IS TO TALK ABOUT PRICE.



Show viewgraph 3-8:

STRATEGY FOR INTERVIEWS

Develop Questions:

- What is Design Team Composition?
- Nature of Quality Assurance?
- Any Time or Labor Saving Innovations?
- How much Work to be Subcontracted?

VG 3-8

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Although interviews can be in the form of <u>telephone discussions or a person to person meeting</u>, most agencies have developed policies based on dollar value. If person to person interviews are utilized, it is usually in the form of a "stand up presentation" by the A-E.</p> <p>After the interviews are completed, the board must meet once more to <u>rank the firms</u>. Information obtained during the interviews is discussed and evaluated prior to voting on the ranking as to numbers 1, 2 and 3, with 1 being the best qualified.</p> <p>The board is now ready to prepare the <u>board report</u>.</p> <p>Although it appears that the preselection and evaluation board(s) accomplish the bulk of the work, there is still more to do before a selection is made.</p>	

TOPIC: 3.7 SELECTION AUTHORITY MAKES THE FINAL SELECTION


Ref: Text/Reference Pages 3-30 to 3-32

Objective: Upon completion of this lesson the student should be able to describe the functions of the selection authority in making the final selection.

Time: 1:00 - 1:10

Method: Discussion, Lecture

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>The selection authority can reject the recommendations made by the evaluation boards if he/she believes they are based on unsubstantiated or biased opinion. But he/she does NOT HAVE THE AUTHORITY TO ADD NAMES TO THE SELECTION REPORT. Whether the selection authority rejects or accepts the recommendation depends entirely on what is contained in the report.</p> <p>Rejection is rare, but if it does happen, the board report is returned for reevaluation.</p> <p>The board report must be written so the selection authority can determine exactly how the board arrived at their rationale. If the board report does not support the decisions made, it must be rejected. Since the report is SO IMPORTANT, let's discuss what should be contained in a report.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"></div> <p data-bbox="191 426 289 594">Exhibit 3-14 on page 3-29 of T/R.</p>	<p data-bbox="332 300 490 338"><u>Question:</u></p> <p data-bbox="332 342 1076 468">How many of the elements which should be contained in a board report being submitted to the selection authority can the students name?</p> <p data-bbox="332 510 1060 548">List the elements on the blackboard for emphasis.</p> <p data-bbox="332 594 451 632"><u>Answer:</u></p> <ul data-bbox="332 632 1076 1251" style="list-style-type: none"> • Description of project. • Copy of the CBD. • Selection criteria (Including weights if applicable). • Names and addresses of firms. • Findings of the preselection board. • Attributes of each firm based on selection criteria only. An explanation of which criteria caused a firm not to be selected for an interview • For those interviewed and ranked, documentation must include the ranking of the firm, some general comments on it, and why it was ranked over the next ranked firm. • Results of interviews concerning concept, etc. • If location is listed as a criteria, list location of each firm. • A summary statement. • Copies of all SF 254's and 255's. • Names and signatures of the board members. 	
<div data-bbox="191 1312 272 1396" data-label="Image"></div>	<p data-bbox="332 1325 490 1362"><u>Question:</u></p> <p data-bbox="332 1367 935 1404">How is the selection authority appointed?</p> <p data-bbox="332 1451 467 1488"><u>Answer:</u></p> <p data-bbox="332 1493 1076 1556">The selection authority is the agency head, or a designated person selected by the agency.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
?	<p><u>Question:</u> What type of evaluation does the selection authority perform?</p> <p><u>Answer:</u> The selection authority is required to:</p> <ul style="list-style-type: none"> • Review the recommendations of the evaluation board. • Obtain the advice of appropriate technical, and contractual personnel. • Make a final selection. • If the selection is different than that presented by the evaluation board, a written justification must be provided for the contract file. • Present the final selection, which will consist of a listing, in order of preference, of the firms considered most highly qualified to perform. 	
	<p><u>Question:</u> What is meant by "selected firms?"</p> <p><u>Answer:</u> Once the final selection has been made by the selection authority, all of the firms on this list are considered to have been selected so that the contracting officer may negotiate with these firms in order of preference.</p>	



Question:

Why is this an advantage to the Government?

Answer:

If negotiations are unsuccessful with one firm, the contracting officer can commence negotiations with the next firm on the list. This helps to prevent the procurement from being aborted due to the failure to arrive at a fair and reasonable price.

Rather than start from the beginning, (a very time consuming process) the contracting officer can continue moving from one firm to the next in order of priority, until the list has been exhausted.

Remember that all firms on the final selection list are considered "selected firms".

TOPIC: 3.8 SHORT SELECTION PROCEDURES


Ref: Text/Reference Page 3-32 to 3-34

Objective: Upon completion of this lesson topic, the student should be able to describe the short selection procedures.

Time: 1:10 - 1:20
1:20 - 3:40 Exercise 3.8 and Break
3:40 - 4:30 Questions and Reading

Method: Discussion, Lecture, Viewgraphs, Group Exercise.

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Start off this short subject by showing Viewgraph 3-9:	

SHORT SELECTION PROCESS

FAR 36.602-5

1. Contract under \$25,000
2. Selection by the Board
 - Selection report serves as final ranking.
3. Selection by the Chairperson
 - Chairperson performs Board functions.

VG3-9



Caution the class that the requirement that there be 3 highly qualified firms considered in the process is still valid.

The short selection procedures do not include a two board system, i.e. there is no preselection board.

The procedures for selection by the board are the same as that already discussed, except that there is no selection authority to make the selection.

Selection by the chairperson of the board is used when the board decides that formal action board is not necessary in connection with a particular situation. In this case the chairperson performs all of the functions required under selection procedures.

The agency head or designated selection authority reviews the report and approves or disapproves it. When it is returned to the chairperson, it is turned over to the contracting officer to commence negotiations.

Instructional Sample

SLATE AND SELECTION EVALUATION NOTES - FIRM B

PRIME: RICHARD COLLINS LOCATION Texas

Capabilities Architect Number Employed 9

☐ Small Business ☐ SEB ☐ SDB ☐ 8(a) ☐ Other _____

Numbers shown in first column correspond to Subs/Consultants as listed on SF 255, Item #6.

#	Project Responsibilities/Location	Notes/Comments
1	Edward Swift & Associates	Mech / Elect : Texas
2	Hernandez, Hart, & Mora	Mech / Elect : Texas

from SF 255 → 7(b) 7(e) 7(f) 7(d) 7(g)

#	Project Assignment	Degree		Registration		Yrs.		Related Experience
	Key Individuals - Block 7	Type	Year	Type	State	Curr	Prev	
	Project Manager	BA	54	A	Tx	14	22	Food / Awards
1	Engineer Asst. (Swift)					7	2	Project Design Tech.
2	Structural Engineer	BS	72	A-Struc	Tx	3	4	Commissaries
2	Struct. Design Engineer	BS	75			7	2	3 Commissaries
	{FYI - Project manager is Richard Collins;							
	Engineer Asst. from Swift is Michael Dunlap;							
	Structural Engineer from H, H, M is Lewis Mora;							
	Struct. Design Engineer from H, H, M is Thomas Brown.}							

General Notes Concerning Evaluation: _____

Instructional Sample

EVALUATION RELATING TO CBD SELECTION CRITERIA - FIRM B

1. Professional qualifications of the team members assigned to this project. (Excellent, average, etc.)

Average (+)

2. Recent experience, within the last 5 years, of team members in the design of food facilities, cold storage areas, parking lots, demolition of existing structures, fire protection systems and conducting energy systems analysis.

Several Addition / Alteration Commissary Projects (See Block 8);

Experiences in fire protection systems (See Item 9, Block 10)

3. Experience in conducting asbestos surveys including testing and sampling and in the design of asbestos removal procedures.

19 Asbestos Surveys and removals in past 5 years. (See Item 10, Block 10)

4. Specific quality control and coordination methods used during design. Also provide a customer reference with address and telephone number for all projects listed as related experience for item 2, above.

Uses team approach headed by Principal / Owner. (See Item 3, Block 10)

5. Past performance on Government and/or private industry contracts. Firms having received design awards will be fully recognized in judging that firm against other qualified firms.

3 Merit Awards; Never been charged with errors or omissions.

Work includes both Government and private sector.

(See Block 9 and Item 4, Block 10)

6. Capacity to accomplish the work starting Month/Year and completing Month/Year. Project workload schedule must be provided showing proposed team members for the period listed.

(See Item 6, Block 10)


7. Cost control methods using during design. Provide bidding record (low bid vs. estimate) for all projects listed as related experience for item 2, above.

Historically estimates are in the medium range of the bid spreads.

(See Item 7, Block 10)

8. Geographic location of the firm with respect to the project.

San Antonio, Texas

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Instructor's Key to CE-3.8	
	<p>The results of the classroom exercise are purely subjective. The firms which are being rated are considered nearly equal. Therefore, the various groups will probably end up with different rankings. Since there are no right or wrong answers, the exercise is designed to be one which will stimulate discussion.</p> <p>Call on each of the groups to present their rankings as well as their rationale. After each presentation, ask the class to respond to the following questions:</p> <ol style="list-style-type: none"> 1. Did the group follow the synopsis criteria in their ranking? 2. Was the group rationale reasonable? 3. What method of selection was employed? Did they use numbers in their rankings? Narratives?, etc? 	

Record rankings on Flipchart or Blackboard using matrix format below. (Student copy is blank in "actual" column.)

		GROUPS					Actual
		1	2	3	4	5	
CHUBBY, INC.	A						1
RICHARD COLLINS	B						
HELLMAN/PAULSON	C						
GARRIS AND SLICK	D						2
LUCKY HIGHTOWER	E						
KINDIGH ROMERO STEIN	F						3

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> When you were evaluating the qualifications, expertise, and experience of the persons listed on the 255's, whom did you think was most instrumental for the project? Principle in Charge? Project Manager, etc.?</p> <p><u>Answer:</u> The project manager carries more weight than the Principle in Charge, as the Principle in Charge is usually listed as being in charge in name only. In most firms the project manager is actually the one who will manage the project.</p> <p>Tell students that one of the firms which they evaluated had a project manager who did not have a degree. While this does not, in itself, determine that the person is qualified or not, some additional information about that person should be available, such as: How much experience has this person had? What are some of the examples of projects that were overseen by this individual? Most firms hire professional engineers as their project managers. If the job is complex or state of the art, the person in charge should certainly be an engineer.</p>	
	<p>INSTRUCTIONS FOR THE INSTRUCTOR CONCERNING THIS EXERCISE:</p> <ol style="list-style-type: none"> 1. If groups are smaller than 6 individuals, the instructor may want to eliminate Firm D from consideration. 2. Prior to the beginning of the exercise, go over the "Slate and Selection Evaluation Notes:" form showing the students how to use the form as they "evaluate" the firms individually and then "rank" as a group. 3. Tell students to record their rankings on the Matrix format provided in the Class Exercise book and the rankings of the other groups as they are presented. <u>When presentations are complete, tell students this exercise was taken from a real A-E selection, and the actual rankings were as indicated in the Matrix above.</u> 4. This is an opportunity to relate your own experiences with A-E board evaluations, time permitting. 	

THE WRAP UP

In conclusion of the lesson, the instructor will ask the students, one at a time, to answer the questions presented at the end of the scenario at the beginning of the chapter.

Textbook answers are found in the Text Reference at the conclusion of the chapter on page 3-35. A copy is provided herein. Instructor will be satisfied that the students are able to answer the questions without referring to their Text.

The questions which were addressed:

- 1. Do Brooks Act procedures promote favoritism?**
- 2. Does the Brooks Act promote full and open competition?**
- 3. Do Brooks Act procedures result in fair and reasonable prices?**

Q & A ' s

Now that you have completed this chapter, you should be able to answer the questions posed at the beginning.

(1) If Brooks Act procedures are followed closely there is no way that favoritism can control the outcome of the selection. You have learned about the various layers of control and review which must be met throughout the process. If the Brooks Act procedures are to be corrupted, for any one procurement, it would take the coordinated efforts of a number of individuals.

(2) Brooks Act procedures most definitely promote full and open competition. What is not always well understood is that the competition is based on the professional qualifications, specialized experience, and capacity to do the work. The responsibility rests on the Government to ensure that the scope of services and the selection criteria correctly reflect the services required. These are then published in the CBD where A-E firms can judge for themselves if they are competitive. The evaluation board and selection authority identify at least three of the most highly qualified firms, rank them in order of preference, and pass the list to the contracting officer for negotiations.

(3) The Government's concern to receive a fair and reasonable price for services is intrinsic to the Brooks Act. The reason at least three firms are selected is that the most preferred firm knows if their price for the services is unreasonable, the Government can terminate negotiations and negotiate with the second most preferred firm. So if the A-E firm really desires to be awarded the contract, they must present the Government with a fair and reasonable price position.

Rebecca and Mike discovered that Brooks Act procedures are a viable and competitive means of procuring professional services. They both came to the correct conclusion that the author of the article did not understand Brooks Act procedures very well. In fact, the author's last statement, about needing a different set of procedures for selection of professional services on the basis of demonstrated competence, public announcement, qualifications of the type of professional services required at a fair and reasonable price, made it clear that he/she didn't understand that this is what Brooks Act already does.

Professionals traditionally subscribe to the Federal Brooks Law Method, sometimes referred to as Quality Based Selection (QBS).

However, there is enormous pressure being brought to bear by proponents of price competition in ALL procurements, to repeal the Brooks Act and select A-E's by a modified version of Source Selection.

Proponents of price competition maintain that it is truly absurd to contend that merely because price is a consideration before selection, firms so selected will be incapable or inadequate performers. They maintain that professional A-E services should be measured in quality, but NOT necessarily excluding price; that both criteria must play an important role in the procurement of A-E services

They are recommending that the policy for selecting professional services should be on the basis of what they describe as free and open competition, demonstrated competence, public announcement, qualification for the specific type of professional service required, and fair and reasonable prices.

LESSON PLAN

NEGOTIATION AND AWARD

CHAPTER 4

TIME	LESSON	OBJECTIVES
8:00 - 9:00	Exercise 3.8 Presentation	
9:00 - 9:10	4.0 Introduction	
9:10 - 10:00	4.1 Issue a Request for Proposals	
10:00 - 10:20	B R E A K	
10:20 - 11:00	4.2 Evaluate Govern-ment Estimate	
11:00 - 11:30	4.3 Evaluate A-E's Proposal	Obtain cost & pricing data (if necessary).
11:30 - 12:30	L U N C H	
12:30 - 1:00	4.3 (cont. Profit vs. 6% Fee)	
1:00 - 3:00	Exercise 4.3	
3:00 - 3:10	4.4 Prepare for Negotiations	<ul style="list-style-type: none"> • Establish objectives • Set date and notify participants
3:10 - 3:25	4.5 Negotiate	<ul style="list-style-type: none"> • Evaluate for fair and reasonable price • Go to next firm on list if not fair & reas.
3:25 - 3:30	4.6 Obtain Approvals & Issue Contract	
3:30 - 4:30	Questions & Reading	

LESSON PLAN
NEGOTIATION AND AWARD

LESSON TOPIC GUIDE

FEDERAL ACQUISITION INSTITUTE

TOPIC: **4.0 INTRODUCTION TO NEGOTIATION AND AWARD**


Ref: Text/Reference Pages 4-1 through 4-4

Objective: To enable the student to understand and participate in the negotiation and award of an A-E contract, including the issuance of the Request For Proposal, the evaluation, the preparation for negotiation, and the actual negotiation which leads to the award.

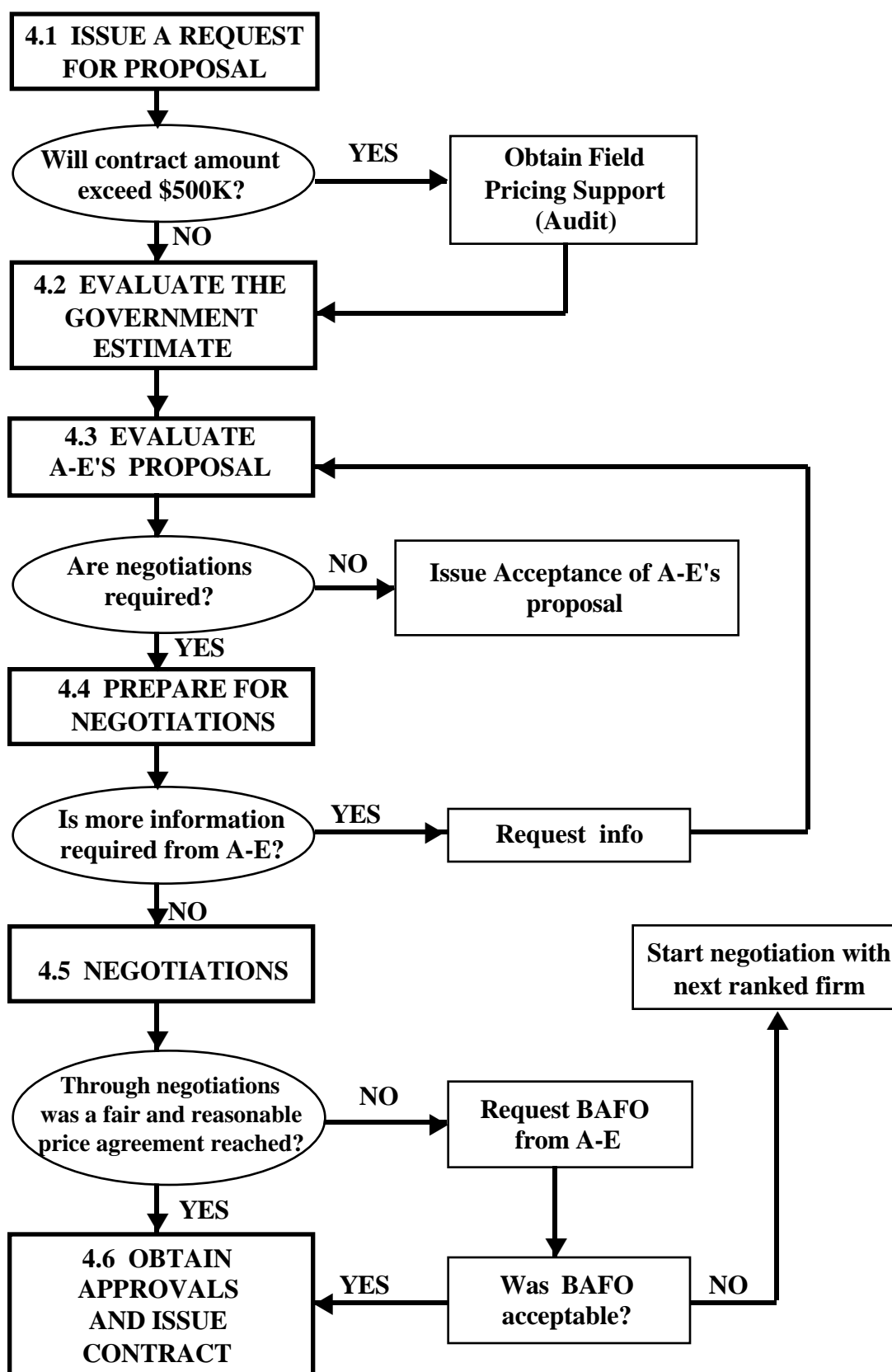
Time: 8:00 - 9:00 Complete Exercise 3.8
 9:00 - 9:10

Method: Lecture, Flowchart

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Overview and Objectives: Your main exercise today will be to review and evaluate an A-E proposal.</p> <p>It is vital that you understand how to review and evaluate the Government estimate and the contractor's proposal, applying the basic cost principals as they pertain to A-E contracts.</p>	<ol style="list-style-type: none"> 1. What are the tasks that have to be accomplished before you can sit down and negotiate? 2. What happens if you reach an impasse with the A-E and it is futile to continue? 3. What approvals have to be obtained before an award can be made?
	<p>Presentation: Go over the flowchart with the students, briefly explaining what is to be covered in this lesson.</p> <p>Tell the students to turn to the vignette on page 4-1 and ask them “What are Tim’s concerns?”</p>	

STEPS IN NEGOTIATION AND AWARD



TOPIC: 4.1 ISSUE A REQUEST FOR PROPOSAL


Ref: Text/Reference Pages 4-5 through 4-13

Objective: Upon completion of this lesson, the students should be able to issue a Request For Proposal to the selected A-E, using the appropriate forms, incorporating all of the standard clauses, and identifying all of the appropriate clauses that are peculiar to A-E contracts. The RFP will provide a well written Scope of Services, incorporating all of the information necessary for the A-E to meet the Government requirements, free from ambiguities, and errors.

Time: 9:10 - 10:00
10:00 - 10:20 BREAK

Method: Group Discussion, Lecture, Viewgraph

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Start the class off by showing Viewgraph 4-1.	

RFP IS NOT AN AWARD

Costs of Preparing a Proposal

are considered




Costs of Doing Business and



will not be




Reimbursement by the Government.

VG 4-1

Request for Proposal should be accompanied by a letter to the A-E pointing out that any costs incurred in developing a proposal in response to the request, are not refundable by the Government. If the price submitted by the selected A-E is not what the Government considers as fair and reasonable, then negotiations will be abandoned, and the A-E next in line will be issued an RFP.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Question: What does an A-E Request for Proposal typically consist of? (documents)</p> <p>Answer: Make a list on the blackboard as the students respond.</p> <ol style="list-style-type: none"> 1. Scope of work 2. References 3. Clauses and provisions 4. Completion schedule / schedule of submittals 5. Start date 6. Point of contact 7. Instructions on how to present cost data 8. Options 9. Dates that options will be executed 10. Cost and pricing statement 11. Date when proposal must be submitted 12. SF 252 (partially completed) 	<p>Make reference to SF 252 in TR at p. 4-6 and indicate what is <u>not</u> filled in.</p>
 FAR 52.243-1	<p>Question: Identify the FAR clauses used for A-E contracts.</p> <p>Answer:</p> <p>Responsibility of the A-E Contractor</p> <p>Termination (Fixed Price A-E)</p> <p>Suspension of Work.</p> <p>Payments under Fixed-Price A-E Contracts</p> <p>Design Within Funding Limitations.</p> <p>Changes - Fixed Price (Alternate III)</p>	<p>NOTE: Spend the rest of the allotted time for this section going over these clauses in some detail.</p>
 FAR 52-236-23 T/R 4-8	<p>The RESPONSIBILITY OF THE A-E CONTRACTOR. clause basically says that the A-E is responsible for the quality, technical accuracy and coordination of all designs, specifications etc. The language used is blunt and to the point, leaving no doubt that by signing the contract, the A-E warrants that it has the ordinary skill, knowledge and judgment to perform the work.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 FAR 52.249-7 T/R 4-9	<p><u>Question:</u> Can anyone in the class explain what is different about the Termination Clause for an A-E contract, as opposed to the one contained in construction contracts?</p> <p><u>Answer:</u> First, in an A-E contract there is only one clause, addressing both Termination for Convenience and Termination for Default.</p> <p>Second, the language is clearer, simpler, and more direct than that used in the other such clauses.</p>	
 TR 4-10 and 11 FAR 52.236-22 TR 4-12	<p>Tell the class:</p> <p>For the most part, the Suspension of Work and Payments under Fixed-Price A-E Contracts clauses are similar to the construction/supply clauses.</p> <p>The Design Within Funding Limitations clause requires the A-E to design a facility that can be constructed within the dollar limit that has been established for the construction project.</p> <p>The dollar limit is based on the Estimated Cost of Construction, referred to by most agencies as the ECC, which is agreed upon during negotiation.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> What if the A-E believes the Government ECC to be unrealistic?</p> <p><u>Answer:</u> It is the A-E's responsibility to bring it to the attention of the contracting officer immediately. After discussions concerning detailed scope, the Government will either</p> <ul style="list-style-type: none"> • agree with the A-E and revise the ECC, or • in the event an agreement cannot be reached, abandon negotiations and issue an RFP to the A-E next in line. 	
	<p><u>Question:</u> What if both the Government and A-E agree in negotiations that the ECC is realistic, but all bids for the construction contract exceed the ECC. This is commonly referred to as a "<u>bid bust</u>".</p> <p>Must the A-E then be responsible for redesign-ing the project in accordance with the clause?</p> <p><u>Answer:</u> Yes, unless the A-E can establish by supportive evidence that bids came in high due to some factor of which neither the Government nor the A-E had previous knowledge or control over.</p> <p><u>For instance</u>, construction costs suddenly escalated due to a rise in steel prices, or some other commodity, which was significant enough to cause bids to escalate sharply without warning.</p> <p><u>Another instance</u> might be that the construction industry found itself in a "boom", causing prices to escalate with the market responding to supply and demand by quoting higher prices because of the demand.</p>	
	<p>The Changes clause for architect engineer contracts basically follows the same provisions of the standard supply/construction clause. Changes will also be discussed in Chapter 5.</p>	<p>Advise the class that a more detailed discus-sion of this clause will take place in Lesson 5, under the topic "Remedies."</p>

TR 4-13

TOPIC: 4.2 EVALUATE THE GOVERNMENT ESTIMATE


Ref: Text/Reference Pages 4-14 through 4-21

Objective: Upon completion of this lesson, the students should be able to understand how the Government arrives at an estimate, and be able to review and evaluate it as to its completeness, and determine if it is free from mathematical errors and in the same format as the A-E's proposal.

Time: 10:20 - 11:00

Method: Group Discussion, Lecture, Viewgraphs




LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 FAR 36.605(a)	<p>The requirements for the preparation of an estimate of the cost of A-E services are contained in the FAR and usually supplemented by agency policy with regard to dollar thresholds.</p> <p>Most agencies endorse the policy that an estimate shall be prepared for all procurements, with the extent of detail commensurate with the complexity and dollar value of the project.</p> <p>Ask the students to describe their agency policy in this regard, allowing sufficient time for input and discussions.</p> <p>An estimate will be:</p> <ul style="list-style-type: none">• In the same format as that of the A-E's proposal,• In the same detail as that of the A-E's proposal, and• Approved, usually, by the head of the design division prior to receipt of the A-E proposal. <p>Refer students to the A-E Fee Proposal/Government Estimate form on p.4-15 of the T/R.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 283 272 363" data-label="Image"></div>	<p><u>Question:</u> In construction contracts, the Government estimate is revealed at bid opening. Is this also true when it comes to receipt of A-E proposals?</p> <p><u>Answer:</u> NO. The Government estimate is not revealed.</p> <p>During negotiations, some elements may be revealed to the extent deemed necessary in arriving at a fair and reasonable price, provided that the overall amount of the estimate is not disclosed.</p> <p>Under no circumstances can the cost breakdown figures contained in the Government estimate be discussed or revealed prior to negotiations.</p>	
<div data-bbox="191 882 272 961" data-label="Image"></div>	<p><u>Question:</u> Can the Government estimate be changed at any time during negotiations?</p> <p><u>Answer:</u> It is subject to change during negotiations if it is found to be in error:</p> <ul style="list-style-type: none"> • However, the change is not made on the original estimate. • Instead, any change that is made during, or subsequent to, price negotiation shall be specifically, but succinctly explained in the Price Negotiation Memorandum. • In addition, the change must be approved by the same approval authority that approved it in the first place. 	
<div data-bbox="191 1570 272 1650" data-label="Image"></div>	<p><u>Question:</u> What sort of data are used in preparing a Government estimate?</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Answer:</u></p> <ul style="list-style-type: none"> • <u>Scope of Work:</u> <ul style="list-style-type: none"> - Project description. - Guide Specs, Technical Manuals. - Design and submittal procedures. • <u>Design Criteria:</u> All criteria and data needed to complete contract negotiations must be identified and provided to the A-E with the RFP, i.e. <ul style="list-style-type: none"> - Preliminary information on foundations and or pavement designs must be identified and furnished. - Basic contour maps for use in completing preliminary or concept data. - Final topography maps, laboratory test results, subsurface information. • <u>Project milestones</u> are identified. • <u>Funds</u> available for the project. <p>Armed with this information, the estimator is ready to go to work developing a detailed analysis estimate.</p>	
	<p><u>Question:</u> What is meant by "detailed analysis estimate"?</p> <p><u>Answer:</u></p> <ol style="list-style-type: none"> 1. A <u>sheet count</u> must be developed for each engineering discipline (i.e. architectural, civil, structural, mechanical, or other). 2. Estimates are made of the <u>man hour</u> requirements for each phase of the services required on the sheet count. 3. <u>Hourly rates</u> are developed by identifying the types and competency levels of per-sonnel required to perform the design work. 4. The hourly rates are then applied to the effort (estimated manhours required). 5. Dollar amounts are established for site investigations, design services, consultants, and in some cases, shop drawing reviews, as-builts, Construction Contract Con-sultation services, and inspection services. 	





REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>6. Numbers and kinds of meetings, consultations and design presentations are estimated.</p> <p>7. Travel requirements are identified and costed out.</p> <p>8. Other direct costs are identified.</p> <p>9. Allowances are then made for overhead and profit in order to arrive at the total estimated fee.</p>	
	<p>Question: How many students in the class have evaluated a Government estimate on an A-E contract?</p>	
	<p>Tell the students The detailed Government estimate will be broken down into several categories.</p>	
	<p>Question: What are these categories?</p> <p>Answer Show VG 4-2</p>	<p>NOTE: Most A-E's lump their overhead into same pool as G & A.</p>

ELEMENTS OF COST

- DIRECT LABOR OR SALARY
- OVERHEAD ON DIRECT LABOR
- GENERAL AND ADMINISTRATIVE
- MATERIAL
- TRAVEL
- OTHER SIGNIFICANT ITEMS
- PROFIT

VG 4-2

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the class:</p> <p>It is important to make sure that data used to arrive at these elements is <u>current</u>.</p> <p>Estimates are sometimes made which are based on historical data that, in turn, was based on historical data, etc., compounding any errors made on the original data, and resulting in outdated or erroneous information being perpetuated.</p>	
	<p><u>Question:</u></p> <p>What other considerations affect costs provided in the Government Estimate?</p> <p><u>Answer:</u></p> <p>Other Considerations:</p> <ul style="list-style-type: none"> • <u>Size of the job</u> (Fixed expenses improve with job magnitude). • <u>Period of performance.</u> (Risk on profit is more significant in longer periods of performance.) • <u>Investment.</u> (Amount of subcontracting, Government furnished items, surveys already performed, soil tests, etc.) • Amount of <u>assistance</u> to be expected from the Government. • Amount of the job to be <u>subcontracted</u> 	

TOPIC: 4.3 EVALUATE A-E'S PROPOSAL




Ref: Text/Reference Pages 4-21 through 4-29


Objective: At the completion of this lesson students should be able to evaluate an A-E proposal using a structured guidelines form to determine profit, evaluate costs, and be able to correctly identify unallowable costs.

Time: 11:00 - 11:30
11:30 - 12:30 LUNCH
12:30 - 1:00 (Profit vs. 6%)
1:00 - 3:00 Exercise 4.3 (Breaks taken during exercise time.)

Method: Group Discussion, Lecture, Viewgraphs and Class Exercise

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the class:</p> <p>In the procurement of architect-engineer services, the A-E is required to submit a proposal in response to the Government's Request for Proposal (RFP). In responding, the proposal constitutes the contractor's initial negotiating position.</p>	
	<p><u>Question:</u></p> <p>To properly negotiate a price that is fair and reasonable to the Government, the contract specialist must be familiar with each of the elements that should be contained in the A-E's proposal. What are the elements being referred to?</p>	
	<p><u>Answer:</u></p> <p>Allow sufficient time for interaction to the question before showing the viewgraph.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Show Viewgraph 4-3:	

REVIEWING THE A-E PROPOSAL

You must be familiar with the Scope and be knowledgeable of:

- **Structure of the Proposal,**
- **TINA Requirements,**
- **Cost Principals, and**
- **Elements of Cost Peculiar to A-E's.**

VG 4-3

Leave the viewgraph on the screen during the following discussion.

By obtaining the contractor's proposal well in advance of the negotiation, the reviewer can compare the contents, analyze both the Government estimate and the A-E's proposal in detail, and establish strategies in support of a legitimate and sound prenegotiation position.

There are actually two separate evaluations to be made:

- Contractual.
- Technical.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"> </div>	<p data-bbox="331 300 490 338"><u>Question:</u></p> <p data-bbox="331 344 1078 594">Since most of you here in the classroom are contract specialists, you should be somewhat knowledgeable concerning the contractual side of the issues to be analyzed. What about the technical review? What elements are involved in the technical analysis?</p> <p data-bbox="331 642 470 680"><u>Answer:</u></p> <ul data-bbox="354 684 906 888" style="list-style-type: none"> • Proposed staffing. • Manhours proposed. • Numbers of drawings proposed. • Effort for producing the specifications. • Reproduction requirements, and • Phasing of the design work. <p data-bbox="331 924 1078 1094">In order to analyze all elements listed, both the contract specialist and the technical reviewers must be familiar with the scope, and both must be alert for signs of misinterpretation by the A-E in the scope of services required.</p> <p data-bbox="331 1129 1078 1230">The importance of understanding the scope of services required cannot be emphasized enough. It is the basis of measurement of:</p> <ul data-bbox="354 1234 1078 1404" style="list-style-type: none"> • Selecting the A-E. • Evaluating the A-E's proposal. • Evaluating the A-E's product (design). • Evaluating the A-E's final product, (the project after construction). <p data-bbox="331 1440 1078 1610">In some agencies, some form of technical analysis is always made. In others, it is a policy to only require a technical analysis when there is a difference of 10% or more in cost between the Government estimate and the A-E proposal.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 279 272 352" data-label="Image"> </div>	<p><u>Question:</u> The contract specialist must be knowledgeable concerning the structure of the A-E's proposal. What is meant by "<u>structure</u> of the proposal?"</p> <p><u>Answer:</u> The required format for the A-E to use in submitting a proposal broken down into the several catagories listed on Veiwgraph 4-2. Otherwise you may be comparing apples to oranges.</p>	
	<p style="text-align: center;">AUDIT REQUIREMENTS</p>	
	<p>Contract specialists should know</p> <ul style="list-style-type: none"> • When an audit is required. • What an audit consists of. • How long it takes to obtain an audit, etc. <p>When requesting an audit, be specific. Advise DCAA (or your agency auditors) of:</p> <ul style="list-style-type: none"> • Name of firm selected as first choice. • Any labor or overhead or G&A rates you want them to verify or examine. • Any other element you want them to examine. <p>The DCAA report will analyze costs proposed by the A-E, how cost is allocated, and what was found in the proposal to be duplicated.</p>	
	<p style="text-align: center;">COSTS</p>	
	<p>Contract specialists should also understand costs in terms of:</p> <ul style="list-style-type: none"> • What is allowable. • What is reasonable. • What is allocable. • Which costs are direct. • Which costs are indirect. • How overhead is applied. 	



COST PRINCIPLES

Remind the students that this is not a course on cost and price analysis. Therefore this portion of the lesson will only acquaint them with cost and price issues that pertain to A-E contracting. See Exhibit 4-11 on page 4-23 in the T/R.

QUESTION:

What are some of the most common costs that are not allowable?



Answer:



Show viewgraph 4-4

TYPICAL UNALLOWABLE COSTS

- **ADVERTISING**
- **BAD DEBTS**
- **DIVIDEND PROVISIONS**
- **FINES, PENALTIES**
- **INSURANCE FOR ERRORS OR OMISSIONS**
- **CONTINGENCIES**
- **CONTRIBUTIONS**
- **ENTERTAINMENT**
- **LOSSES**

VG 4-4

For instance, advertising may be allowed if the A-E needs to advertise in order to recruit personnel to perform on the contract.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 	<p><u>Question:</u> What is a direct cost?</p> <p><u>Answer:</u> Show viewgraph 4-5.</p>	

DIRECT COSTS

"But for (this contract) these direct costs could not be incurred" (The Courts)

COST that can be Identified with a Particular Cost Objective:

- **SALARIES**
- **SHIPPING**
- **TRAVEL**
- **REPRODUCTION**
- **SOIL BORINGS**
- **SURVEYING**

VG 4-5



Information to be discussed concerning the viewgraph.


Salaries include:

- **Architect**
- **Engineers**
- **Draftsmen**

The hours they spend working on your contract are direct costs and the cost is allocable. Therefore, it is allowable.

But is it reasonable?

The principal of the firm's salary is direct only for the time he or she specifically spends on your project, if that is how the A-E allocates it. Furthermore the amount of salary paid must be commensurate to that which the A-E could expect to pay an outside source to do the same thing.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>In reviewing the cost portion of the proposal make sure you have:</p> <ul style="list-style-type: none"> • List all of the disciplines required. • List the estimated manhours. • Extended manhours times the wage rates. • Should include a statement explaining <ul style="list-style-type: none"> - How manhours are estimated. - How they arrived at the wage rate. - Provide reference of the source they used to develop manhours and estimates. 	
	Show viewgraphs 4-6 and 4-7 and discuss.	

DIRECT LABOR

RELATES TO AMOUNT OF EFFORT

HOW MANY?

- **DRAWING?**
- **HOURS OF ENGINEERING?**
- **HOURS OF DRAFTING?**
- **FIELD TRIPS?**


VG 4-6

DIRECT MATERIAL

EXAMPLES:

- **PAPER**
- **MODEL BUILDING MATERIALS**
- **MYLARS**
- **TESTING CONSUMABLES (CHEMICALS)**
- **PHOTOGRAPHS**

VG 4-7

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>One of the things to look for in material as a direct cost is to be sure that we are not paying for computer software that the A-E will retain or should have already had in its possession.</p> <p> Show Viewgraph 4-8 on Travel and discuss.</p>	

TRAVEL

MUST COMPLY WITH JOINT TRAVEL REGULATIONS

- **HOW MANY TRIPS?**
- **HOW MANY PEOPLE ON EACH TRIP?**
- **HOW LONG WILL EACH TRIP BE?**
- **IS THIS TRIP NECESSARY?**

VG 4-8



Caution the class:

In accordance with JTRS, there is no such thing as first class travel for Government employees! No first class travel authorized for the A-E while conducting Government business!

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Show Viewgraph 4-9 on Other Significant Costs and VG-10 on Consultants/Subcontractors.	

OTHER SIGNIFICANT COSTS

- **REPRODUCTION COSTS**
- **RENDERINGS OR MODELS**
- **SURVEYS**
- **CADD SYSTEM COSTS**
- **SOILS INVESTIGATIONS**
- **SPECIFIC CONSULTANTS**

VG 4-9

CONSULTANT/SUBCONTRACTOR




- **SURVEYING/BORINGS**
- **INTERIOR DESIGN**
- **MODEL BUILDING**
- **ACOUSTICAL**
- **SPECIAL FINISHES**
- **ELECTRICAL**
- **MECHANICAL, ETC.**

VG 4-10



Tell the class:

Consultant costs are considered direct costs but generally are not considered as part of the design. This is work effort that provides the designer with data that it can used to make design decisions. However, this is not always true, so you might look for these costs in the design portion of the proposal.



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Typically, the costs listed in the viewgraphs above are considered direct costs to your project, but you have to be careful that they are not costed in both categories - direct and indirect. In addition, you must review the FAR to insure that the particular cost is allowable for the situation.	
	<u>Question:</u> What are indirect costs?	
	<u>Answer:</u> Show viewgraph 4-11.	

INDIRECT COSTS

Those Costs that aren't considered Direct to the Project, but are Expenses the A-E incurs in doing Business and can be spread Proportionately over all of its Business.

- RENT
- PRINCIPAL'S SALARIES
- SECRETARY
- FRINGE BENEFITS
- SOCIAL SECURITY
- INSURANCE
- HOLIDAYS
- VACATION TIME
- ACCOUNTANT
- BONUSES
- UNEMPLOYMENT

VG 4-11

	Tell the class: Indirect costs are usually allocated as overhead or G & A costs. However, in A-E it is common to have these costs in the same pool.
	Show viewgraph 4-12.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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GENERAL & ADMINISTRATIVE

MOST A-Es LUMP THEIR
OVERHEAD
INTO THE SAME COST POOL
AS THEIR
G&A.

VG 4-12



Question:

Ask what kinds of costs go into an A-E's G&A?
List the answers on the blackboard or flipchart as the students respond.

Possible Answers:

- Overall supervision of technical work.
- Drafting supplies.
- Depreciation of drafting room furniture and equipment.
- Office supplies.
- Telephones.
- Office rental.
- Taxes.
- Insurance on the firm's facilities.
- Utilities.
- Salaries of executives.
- Time not directly charged to the project for
 - draftsmen
 - designers
 - engineers
 - architects
- Professional liability insurance (be careful on this one). It cannot be insurance costs obtained specifically for the instant contract.

A-E firm averages for G & A vary from region to region with a spread of approximately 115%, to as high as 140%.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<p>FAR 15.805-1(b)</p> <p>FAR 15.805-2</p>	<p>Truth in Negotiation: The contract specialist must be familiar with the Truth in Negotiations Act requirements. (TINA). For purposes of review ask one of the students to describe what the requirements of TINA are.</p> <p>Description of the Requirements of TINA: FAR requires that cost and price analysis be performed on every negotiated procurement for which cost or pricing data are required. On architect-engineer contracts, cost analysis and price analysis should be performed on all contract actions \$25,000 or more. A price analysis as described in FAR, will be performed on ALL ACTIONS.</p> <p>Background Information: In 1962, P L 87-653, commonly called "truth in negotiations", was passed requiring the Contracting Officer, in certain instances, to obtain cost or pricing data from the contractor and require that a certificate be executed that the data provided are accurate, complete and current as of the date of the final price agreement. Furthermore, it provides for price reductions where the data is found to be inaccurate.</p> <p>Following the passage of the act there was much to do in the courts concerning the certification itself regarding the technical aspects of:</p> <ul style="list-style-type: none"> • how it was to be certified, • when it was to be certified, and • who has the authority to certify. <p>On October 29, 1992, P.L. 102-572 was passed making major changes to the certification requirement. The revision allows that a claim may be certified "by any person duly authorized to bind the contractor with respect to the claim". Other provisions of this law will be discussed in Chapter 5, entitled "Contract Administration."</p> <p>Show Viewgraph 4-13.</p>	



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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CERTIFICATION OF COSTS

- | | |
|-----------------|-----------------------------------|
| 1. THRESHOLD | \$500,000 |
| 2. TO SUBMIT | USE OF SF 1411 |
| 3. CERTIFY DATA | ACCURATE,
COMPLETE,
CURRENT |

FACTUAL COSTS VS JUDGMENTAL COSTS

VG 4-13



Question:

What does cost and pricing data consist of?

Answer:

Cost or pricing data are all facts existing as of the time of agreement on price that prudent buyers and sellers would reasonably expect and having a significant effect on price negotiations.





Question:

Does cost and pricing data include factual prices as well as judgmental prices?



Answer:



Cost and pricing data are factual prices only, and are verifiable. Therefore the A-E's proposal must separate factual prices from judgmental, so that evidence exists at the time of conclusion of negotiations as to what the A-E based its quotations on. It entitles the Government to an adjustment that never goes up, only goes downward.



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES				
<div></div> <div>FAR 15.801 & 804-2</div>	<p>Question: How does the A-E go about separating factual from judgmental costs?</p> <p>Answer: For any negotiation expected to exceed the dollar threshold of \$500,000, the cost certification must be submitted on SF 1411 separating the factual costs from the judgmental costs.</p>					
	<p>Give a couple of examples of each to the class of what constitutes judgmental as opposed to factual, i.e.</p> <table><tr><td>Judgmental</td><td>Engineering time. Drafting time. Research time.</td></tr><tr><td>Factual (Fixed)</td><td>Legal fees. G & A. Wage Rates. Travel. Materials.</td></tr></table>	Judgmental	Engineering time. Drafting time. Research time.	Factual (Fixed)	Legal fees. G & A. Wage Rates. Travel. Materials.	
	Judgmental	Engineering time. Drafting time. Research time.				
Factual (Fixed)	Legal fees. G & A. Wage Rates. Travel. Materials.					
<div></div>	<p>Tell the students: Price analysis as it has to do with A-E contracts consists of examining and evaluating a prospective price without evaluation of the separate cost elements and proposed profit of the prospective contractor. For example:</p> <ul style="list-style-type: none">• Compare the A-E's fee estimate with fees for similar contracts previously negotiated.• Compare the A-E's fee estimate with an estimate based on a predetermined percentage of the ECC.• Use rough yardsticks, such as hours or dollars per drawing to point up apparent gross inconsistencies which should be subjected to greater pricing inquiry.• Compare proposed prices with estimates of cost independently developed by personnel within your agency.					

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>WHAT ABOUT PROFIT?</p> <p>Explain to the class that profit on design services may be squeezed by the 6% limit in profit (especially when executing change orders). This is particularly evident in small projects where it is more difficult to stay within the 6%.</p> <p>In other words the A-E may have to reduce the design costs below its costs on paper, and take the difference out of planned profit.</p>	
<div data-bbox="191 835 272 919" data-label="Image"> </div>	<p><u>Question:</u> How is the estimate of profit arrived at?</p> <p><u>Answer:</u> Most agencies have been wrestling with how to determine profit for a number of years, and along the way, policies have been established by each agency. Most agree on some things, i.e.,</p> <ul style="list-style-type: none"> • Use of standard percentages should not be allowed. • Use of a weighted guidelines structured approach has come to be accepted as a means of determining profit. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Profit is not something that is determined simply by applying a percentage, or by guessing. Profit is affected by many things, but there are three main factors to be consider.</p>	
?	<p><u>Question:</u> Ask the students to name the three profit factors.</p> <p><u>Answer</u></p> <ol style="list-style-type: none"> <u>Performance risk.</u> <ul style="list-style-type: none"> Degree of risk. Relative difficulty of design. Size of the job. Period of performance. A-E's investment. Assistance by the Government. Amount to be subcontracted. <u>Contract type, and</u> <u>Working capital.</u> <p>The contracting officer assigns values to each profit factor; the value is then multiplied by a base which results in the profit objective for that particular factor.</p> <p>Each profit factor has a normal value and a designated range of values. The normal value is representative of average conditions on the prospective contract when compared to others of similar nature.</p> <p>The designated range provides values based on above normal or below normal conditions.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Let's first look at the <u>performance risk</u> factor which can be broken down into three parts.	
	<p><u>Question:</u> Ask one of the students to describe what the factor consists of?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • 1. <u>Technical:</u> Represents the technical uncertainties; the technology being applied to develop the complexity, performance tolerances and completion schedule. • 2. <u>Management:</u> The degree of management effort necessary to ensure that contract requirements are met. • 3. <u>Cost control:</u> The A-E's efforts to reduce and control costs and reliability of estimates. 	
	Computing profit by the weighted guidelines method (outlined above) is a subject which is covered in depth in the Cost and Price Analysis Course except for an overview as to A-E Application. It will not be repeated here.	
	<p>Tell the class: One of the things you should be looking for in an A-E's proposal concerns Facilities Capital Cost of Money."</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> Does the class know what Facilities Capital Cost of Money is?</p> <p><u>Answer:</u> Facilities Capital Cost of Money (cost of capital committed to facilities), is an imputed cost determined by applying a cost-of-money rate to facilities capital employed in contract performance.</p> <p>If a contractor wishes to claim capital cost of money in its proposal, it must be identified and specifically requested in the initial proposal submitted. Otherwise it is not allowed.</p> <p>A-E firms are not allowed to charge facilities capital cost of money both as an indirect or direct cost, and as a element of profit. Since most A-E contractors do not involve this element we will not discuss it further here, other than to state that if you do receive such a request, and during negotiations, it is agreed to do so, the A-E must complete a special form devised for that purpose.</p> <p>Agency policy will prescribe the procedures and the format.</p>	
	<p>Tell the class: "Let's go back once more and discuss technical risk analysis."</p> <p>One element to be considered in assessing technical risk is the relative difficulty of the design. Is it:</p> <ul style="list-style-type: none"> • Simple? • Routine? • Difficult? or • Complex? <p>The element of risks surfaces when determining profit.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 	<p>Question: Ask the students to describe what each would represent. In other words, give an example of a simple project, a routine one, as well as a difficult one. After allowing opportunity for interaction, provide some examples:</p> <ul style="list-style-type: none"> • Simple: Small pre-engineered buildings. Small standard family housing. Equipment shop. Storm window additions. Insulation upgrade. As-built drawings. • Routine: Administrative buildings. Warehouses. Roads. • Difficult: Cafeterias. Cold storage plants. Aircraft hangers. Industrial waste treatment facilities. Laboratories. Dental offices. HVAC systems. • Complex: Hospitals Disposal facilities. Energy monitoring and control systems. Steam plants. High rise buildings. 	

APPLICATION OF 6% FEE LIMITATION



Tell the class:

Evaluating the 6% statutory fee limitation is accomplished by applying it against the Estimated Cost of Construction. (ECC)

The 6% fee limitation is a problem involving interpretation of the law and is one of the most frequent questions asked of lawyers with respect to the Brooks' Act. Therefore, the instructor should spend as much time as possible in answering student's questions concerning WHAT IS and IS NOT covered.



Show Viewgraph 4-14

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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6 % FEE

The 6% statutory fee limitation applies only to the DESIGN services portion of the A-E's proposal:

- **Working Drawings**
- **Specifications**
- **Construction Cost Estimate**

VG 4-14

To aid in this discussion the instructor can use the charts on the following pages as guidelines. [These are included in the Class Exercise Book as part of CE - 4.3.]

Students should be cautioned however, that any excluded services that are related to design must be evaluated to ensure that the excluded costs are only those costs for services **over and above** the normally expected level of standard A-E services.

This is where good interpretation is needed. For example, special energy analyses are excluded, but only those services over and above normal design calculations to design a typical HVAC system and supporting electrical and instrumentation systems.

6% FEE INCLUSIONS

- **Concept services.**
- **Tentative design services or preliminary working drawings.**
- **Working drawing services.**
- **Post construction contract services.**
- **Preparation of multiple bid packages.**
- **Drawings and specifications for demolition of site structures.**
- **Landscape design.**
- **Value management: task team review of design & resultant redesign.**
- **Interior space design - permanent.**
- **Study type models.**
- **Reproduction costs (exclusive of cost to reproduce documents for distribution to bidder.**

6% FEE EXCLUSIONS

INVESTIGATIVE SERVICES:

- Pre-design programming.
- Existing Facilities investigation; Initial site visits.
- Feasibility, functionality, economic studies; Other investigations.
- Environmental assessment services.
- Field and topographic surveys - photographic, boundary, utilities, right of way, property.
- Subsurface explorations and borings; Soils and materials testing.
- Measured drawings and development.
- Site selection.
- Historic preservation studies.

SPECIAL CONSULTANT SERVICES:

- Exhibit design; Flow gaugings, model testing.
- Value Management - critique of criteria, training workshop and review of contractor's VCPs.
- Interior space design - furniture, space layout drawings, drapes and blinds and free standing partitions.
- Fire Safety.
- Acoustical design.
- Food service facilities.
- Traffic and per diem.
- Graphic communication services.
- Services related to out-leased space.

OTHER:

- Services related to Art-in-architecture.
- Travel costs.
- Display models, renderings, and photographs of completed design.
- Postage and telephone costs.
- Microfilming and Reproduction services.
- Record documents ("as built" drawings and marked specifications).
- Inspection of construction.
- Critical path method and other computer scheduling.
- Master planning; Preparation of general design memoranda.
- Post construction contract services (checking shop drawings and sample approvals).
- Compiling operating and maintenance manuals.
- Other services that are not integrally a part of the production and delivery of design, plans, drawings and specifications.

CLASSROOM EXERCISE CE-4.3

Social Security Administration Building Project

Contents for the exercise are found in the order listed below:

- **Instruction**
- **Scope of Work**
- **A-E Fee Proposal, including Estimate of Required Drafting and Engineering Effort**
- **Overhead Analysis Form**
- **General Wage Rates**
- **Questionnaire**

Purpose of the Exercise: Reinforcement of instruction regarding the tasks that are considered when evaluating the A-E proposal:

- Identifying unallowable costs.
- Determining the accuracy and completeness of the A-E's proposal by performing a general review.
- Calculating design services percentage.

Method: Interactive Group Participation

Time: 1 hour 20 minutes for Preparation
40 minutes for Presentation

Instructions: Students are to review the proposal submitted by the contractor and complete the questionnaire following the exercise using the Text/Reference or student lecture notes and the information provided.

The spokesperson will reveal the group's findings during the discussion period following the exercise.

Instructor will allow sufficient time for individuals to introduce questions concerning the exercise.

Ask who has calculators: ensure there is at least one per group. Instructor should bring calculator in the event there are not enough or there is a need to share.

CLASSROOM EXERCISE CE-4.3

REVIEWING THE A-E'S PROPOSAL

INSTRUCTIONS

I. FACTS AND CIRCUMSTANCES

- A. The data furnished in this exercise include the basic design criteria.
- B. Submittals to be made by the A-E:
 - 1. Early Preliminaries (35% complete) (NTP + 6 weeks)
 - a. 30 copies of the Project Engineering Documentation for the prospectus project.
 - b. 2 copies of the preliminary cost estimate.
 - c. 5 copies of specifications.
 - d. 5 sets of drawings.
 - 2. Pre-Final Design (100% complete) (NTP + 18 wks)
 - a. 6 sets of working drawings.
 - b. 6 copies of project manual with bid schedule.
 - c. 2 copies of construction cost estimate.
 - d. Marked 35% submittal.
 - 3. Corrected Final Design (100% complete) (NTP + 24 wks)
 - a. Original tracings plus 1 set of prints and construction bid drawings.
 - b. Original plus 1 set of prints of construction bid drawings.
 - c. Original of Final Design Analysis.
 - d. 2 copies of construction cost estimate.
 - e. Marked Pre-Final submittal.
 - 4. Designer to client presentation.
- C. The A-E is located within 20 miles of the site.

II. THE GOVERNMENT WILL FURNISH THE A-E WITH:

- A. Standard details and symbols to be used.
- B. Guide specifications.
- C. Technical manuals.
- D. Architectural-Engineering instruction manuals.
- E. Site Plan (attached) which was developed in-house two years prior.
- F. First and Second floor plans (attached) from a similar facility design.

CLASSROOM EXERCISE CE-4.3

SCOPE OF WORK

I. PROJECT DESCRIPTION

This two story Administration Building will contain 25,000 square feet and has a programmed dollar amount of \$2,500,000; the estimated construction cost limitation (ECC) is \$2,350,000.

The project is one of several similar projects to be built for Social Security across the country. The lead time for the A-E to submit 35% design is considered tight, as is the rest of the submittals. The contract calls for a constructability review by an independent subcontractor prior to submission of the final design submittals.

The contract type vehicle to be used is a firm fixed price.

II. STRUCTURE.

- A. Complete Description of Facility Function. This building will serve as the Administration Building for the Social Security Office. Located within this building are Social Security Staff, Public Works Department, Telephone Switchboard Operations including the Telephone Central Office switching equipment, Conference rooms, and a Cafeteria (lunchroom).
- B. Materials. Reinforced concrete.
- C. Security Requirements. Routine.
- D. Paper Pulper. Design for a small paper pulper: capacity 25 pounds of waste paper per day. Paper pulper will be Government furnished, installed by construction contractor.

III. GAS DISTRIBUTION.

- A. Areas and Loads. See site plan for the areas to be served. The primary load will be a gas-fired plant.
- B. Light, Ordinary, or Hazardous Occupancy: Design will be based on ordinary occupancy, 24 hours per day.
- C. Capacity of the Existing Water Supply. The existing water supply is adequate for normal use including the proposed new sprinkler system.
- D. Water Flow Alarm System. Activation of the automatic sprinkler system will generate an alarm signal to the fire station.
- E. Fire Alarm. Design the fire alarm system in accordance with local fire codes.

CLASSROOM EXERCISE CE-4.3

IV. PAVING

- A. Parking Lot Capacity. Design parking spaces for 113 vehicles including site parking for building personnel, 8 Government vehicles, and for 2 visitors (message pickups). See sit plan.
- B. Design Loading - Medium. Medium duty bituminous pavement.
- C. Striping and Signs. Design in accordance with regional highway authority conventions/direction.
- D. Lighting. Design mercury vapor lights, controlled by a photo-electric cell, installed on the building exterior illuminating the sidewalks and parking areas. Design lighting intensity to accommodate the 24-hour operation considering shift change during the hours of darkness.

V. ELECTRICAL DISTRIBUTION

- A. Government-Owned Distribution Feeders. Design three phase, 4-wire 7960/ 13800 Volt grounded wye, 60 Hz primary power is available 115 ft south of the new building location. At this point a new pole with three transformers shall be set to deliver 120/208 Volt, 3 phase, wye current. Design service to the building underground to the new mechanical room.

VI. SITE DESCRIPTION

- A. Available Fill. Fill material is not available on the site and will be procured from off-site sources.
- B. Landscaping. Fine grading, restoration of grass, and landscaping of the entire area of construction work is required. A sprinkler system is required due to the climatic conditions of the area.
- C. Disposal Areas. Only soil and natural rock may be disposed of at the city disposal area. Organic materials and construction materials will be disposed off-site.
- D. Heating Value and Type Gas. Design for natural gas (heating value of 1000 BTU/CF). Pressure is regulated outside of the facility and adjacent to the gas-fired equipment inside the facility.
- E. Corrosion Control. Design a cathodic protection system to protect the gas pipeline; cathodic protection system will be compatible with the existing base cathodic protection system.
- F. Soil Geological Conditions Generally Encountered Near the Site
 - 1. Subsurface Condition - General: The site is located in the Coastal Plain physiographic province. The coastal plain is a rolling prairie underlain by Tertiary and Cretaceous age beds of marls, clays, and poorly consolidated sands. These beds are covered by a 5 to 25-foot thick mantle of alluvial overburden consisting of clay, silt, and sand beds underlain by gravel deposits. The gravel deposits are usually water bearing.

CLASSROOM EXERCISE CE-4.3

2. Types of Foundations Generally Used: Due to heaving, the trend is away from deep drilled piers and is toward lightweight mats and shallow spot footings. If there is no suitable shallow stratum capable of supporting the structure, and the structure requires some foundation other than the shallow mat, then drilled and under reamed cast-in-place, concrete piping should be considered by the designer.

3. In lieu of tests, use a CBR value of 4 for uncompacted subgrades.

VII. MECHANICAL CONSIDERATIONS

A. Domestic Hot Water and Drinking Fountains. Design system for domestic hot water and drinking fountains.

B. Air Conditioning Filters. Medium efficiency (50-60%) filters.

C. Special Mechanical Systems. Design for dual refrigeration chillers with air cooled condensor to allow continuation of cooling and concurrent maintenance. Use a chilled water system for versatility in use of dual systems and flexibility for future expansion. Provide one chiller with emergency power. Design to prevent overloading the emergency generator or causing excessive voltage fluctuations that will affect equipment. Provide selector switch for running either chiller independent from the other. Design for maintenance of environmental conditions in the telephone equipment rooms, when emergency power is used. The emergency generator may be located outside if sufficient space is not available in the mechanical room.

D. Energy Evaluation. Evaluation of Energy Budget against current criteria is required. Consider building orientation and solar evaluation or optimum efficiency.

IX. ELECTRICAL CONSIDERATIONS.

A. Telephone Extension Circuit. Provide an empty conduit system for telephone outlets.

B. Standby Power. An existing 100 KW standby generator will be provided as Government Furnished Equipment. Design for new appurtenances such as a transfer switch.

C. Fire Alarm System. Design automatic fire detection equipment to provide local, audible alarms and send automatic coded alarms to the central fire station. Connection from the building to the central fire station shall be by others.

D. Security Alarm System. Design a security duress and intrusion burglar alarm system.

E. Emergency Lighting. Provide automatic battery-operated emergency lighting for the entire building in accordance with NFPA Codes.

F. Lighting Levels and Illumination Required. Design lighting providing illumination levels in accordance with the Illumination Engineers' Society Handbook recommendations.

CLASSROOM EXERCISE CE-4.3

G. Receptacles for Portable Equipment. Design receptacles for portable equipment. Provide 208V 30 amp receptacle for paper pulper.

X. SPECIAL CONSIDERATIONS.

A. Equipment List. The telephone plant will consist of 2600 lines, "Stroger" switch, step-by-step system. Four positions of switchboards to support the 2600 lines. Twenty-three storage batteries with one rectifier. Two test boards and a main distribution frame (MDF) with 33 vertical of 302 pair count for each verticula. This function will operate 24 hours per day, 7 days per week. The following equipment will be in operation: one teletype printer for official Western Union Traffic; two teletype machines ASR 28; one IBM transmission control, 100 cards per minute unit.

B. Utilities Tie-In Requirements. All gas, water, electric and sewer services are available and adequate in the immediate vicinity.

C. Government-Furnished Equipment. All telephone equipment in this facility will be Government-furnished and Government-installed.

D. Master Keying Requirements. This facility has been located within the Commercial Complex on the master plan and master keying is required.

A-E FEE PROPOSAL				
PROJECT TITLE:		SOCIAL SECURITY ADMINISTRATION		
LOCATION:		ANY TOWN, USA		
NAME OF FIRM:		SMITH/SMITH & ASSOC.		
CONTRACT NUMBER:				
ESTIMATED CONSTRUCTION COST:		\$2,350,000		
SECTION A: DESIGN				
	NO. OF DRAWINGS	EST. NO OF HOURS	HOURLY RATE	TOTAL ESTIMATED COST
ITEM 1				
A. PROJECT ENGINEER		214	30.50	6527.00
B. ARCHITECT	10	248	27.05	6708.00
DRAFTSMAN		300	14.00	4200.00
C. STRUCTURAL ENGINEER	4	160	28.80	4608.00
DRAFTSMAN		106	14.00	1486.00
D. MECHANICAL ENGINEER	9	155	28.05	4348.00
DRAFTSMAN		132	14.82	1956.00
E. ELECTRICAL ENGINEER	5	165	26.95	4447.00
DRAFTSMAN		144	14.00	2016.00
F. CIVIL ENGINEER	7	168	26.05	4376.00
DRAFTSMAN		154	14.00	2156.00
G. LANDSCAPE ARCH. DRAFT.				
H. OTHER	3	16	14.00	224.00
TOTAL ITEM 1	38	16	14.00	43,052.00
ITEM 2				
A. SPEC/REPORT WRITER		170	21.00	3570.00
B. TYPIST		200	12.50	2500.00
C. OTHER		40	9.50	380.00
TOTAL ITEM 2				6450.00
ITEM 3				
A. COST EST. ENGINEER		84	23.00	1932.00
TOTAL DIRECT COST (ITEMS 1,2,3)				\$51,434.00
OVERHEAD (G&A): 153 % X \$51,434 = \$78,694.02				\$78,694.00
PROFIT: 9.8 % X (\$51,434+\$78,694) = \$12,763				\$12,763.00
TOTAL THIS SIDE NOT TO EXCEED 6% OF ESTIMATED CONSTRUCTION COST		DESIGN TOTAL (DIRECT COST + G&A + PROFIT)		\$ 132,891.00

PREPARED BY: _____

DATE: JUNE 20, 199x

A-E FEE PROPOSAL SIDE TWO

		EST NO. HOURS	HOURLY RATE	TOTAL ESTIMATED COST
SECTION B				
REVIEW CONTRACT SUBMITTALS		60	30.50	1830.00
		80	28.05	2244.00
			SUB-TOTAL	4074.00
SECTION C				
RECORD DRAWING PREPARATION		80	14.00	252.00
SECTION D				
INTERIOR DESIGN		90	16.50	1485.00
SECTION E				
ENGINEERING SERVICES	1. SITE INVESTIGATIONS			
	A. SUB SOIL STUDIES			
	(1) BORINGS 20 @ 25 LG = 500 LF X 9.80 LF			4900.00
	(2) MOBILIZATION 250.00 + REPORT 400 =			650.00
	B. SURVEYS: PARTY DAYS 2 DAYS @ 750.00			1500.00
	C. FIELD			
	INVESTIGATIONS: MAN DAYS 4 DAYS @ 210.00=			840.00
	2. SERVICES-CONSULTANTS OR OTHER			
	SPECIAL COSTS			
	A. COMPUTER STUDY			
	B. ENVIRONMENTAL STUDY TYPE 2			
	C. REPRODUCTION			
	1. DRAWINGS 38 @ .27 X 40 = 410.00			
	2. SPECIFICATION COPIES 40 @ \$28.00 =			1120.00
	D. OTHER			
	SUB-TOTAL			12,220.00
SECTION F				
TRAVEL	AUTO MILES 240 @ .26 = 62.40			62.00
	AIRFARE + RENTALS =			
	PER DIEM: DAYS @ \$28 Day =			224.00
	SUB-TOTAL			286.00
NON-DESIGN TOTAL				
	(AMOUNT TO INCLUDE: OTHER DIRECT COSTS + G&A + PROFIT)			
	TOTAL OTHER DIRECT COSTS (SECTIONS B,C,D,E &F)			18,317.00
	OVERHEAD (G&A): 153% X 18,317 =			28,025.00
				46,342.00
	PROFIT 9.8 X 46,342.00 =			4,542.00
				50,884.00
	TOTAL FROM SECTION A			\$132,891.00
	TOTAL CONTRACT AMOUNT			\$183,775.00

CLASSROOM EXERCISE CE-4.3

ESTIMATE OF REQUIRED DRAFTING AND ENGINEERING

	NO. OF SHEETS	DRAFTING TIME	ENGINEERING TIME
<u>MISCELLANEOUS</u>			
COVER	1	4	-
INDEX	1/2	2	-
BORINGS LOG	1	8	-
LOCATION MAP	1/2	2	-
SUBTOTAL	3	16	0

<u>CIVIL</u>			
ABBREVIATIONS AND SYMBOLS	1	16	12
SITE DEMOLITION PLAN	1	36	20
SITE LAYOUT PLAN	1	14	32
PAVING DETAILS	1	16	8
GRADING PLAN	1	32	48
UTILITIES PLAN	1	12	28
UTILITIES DETAILS	1	20	16
LAWN SPRINKLER SYSTEMS	1	8	4
SUBTOTAL CIVIL	7	154	168

<u>ARCHITECTURAL</u>			
FLOOR PLAN	2	40	60
INTERIOR ELEVATIONS	4	24	24
EXTERIOR ELEVATIONS	2	16	16
SECTIONS AND DETAILS	1	36	36
DOOR AND WINDOW SCHEDULES	1/2	30	12
DOOR DETAILS	1/2	8	8
WINDOW DETAILS	1/2	10	4
WALL SECTIONS	1	44	32
EQUIPMENT SCHEDULE	1/2	24	26
REFLECTED CEILING PLAN	-	-	-
MISCELLANEOUS DETAILS	-	-	-

CLASSROOM EXERCISE CE-4.3

	NO. OF SHEETS	DRAFTING TIME	ENGINEERING TIME
<u>ARCHITECTURAL</u>			
SIGNS	1	20	10
FOOD SERVICE DETAILS	1	48	20
SUBTOTAL ARCHITECTURAL	10	300	248
<u>STRUCTURAL</u>			
FOUNDATION PLAN	1	20	32
FOUNDATION DETAILS	ON FOUNDATION PLAN	12	2
FRAMING PLAN	2	30	26
FRAMING DETAILS & SECTIONS	ON FRAMING PLAN	14	24
SUPERSTRUCTURE DETAILS	1/2	18	32
BEAM, JOIST & COLUMN			
SCHEDULE	1/2	12	26
SUBTOTAL STRUCTURAL	4	106	160
<u>MECHANICAL</u>			
PLUMBING ROOF PLAN	2	28	32
PLUMBING DETAILS	1	8	8
PLUMBING SCHEDULES	1	12	4
SPRINKLER FLOOR PLAN	1	16	12
HEATING & A/C FLOOR PLAN	1	24	31
HEATING & A/C DETAILS	1	12	8
HEATING & A/C SCHEDULES	1	8	8
AIR SYSTEM PLAN	-	-	-
HYDRAULIC SYSTEM PLAN	-	8	2-
HEATING & A/C CONTROLS	1	16	32
SUBTOTAL MECHANICAL	9	132	155

CLASSROOM EXERCISE CE-4.3

	NO. OF SHEETS	DRAFTING TIME	ENGINEERING TIME
<u>ELECTRICAL</u>			
LIGHTING FLOOR PLAN	1	32	40
POWER FLOOR PLAN	1	34	44
ELECTRICAL DETAILS	1	24	8
ELECTRICAL SCHEDULES	1	12	8
SUBSTATION	-	10	20
COMMUNICATIONS PLAN	1	32	45
SUBTOTAL ELECTRICAL	5	144	165
TOTAL	38	852	896

CLASSROOM EXERCISE CE-4.3

OVERHEAD ANALYSIS FORM

A-E FIRM _____

PROJECT and LOCATION

(___ MONTHS ENDING ___ FROM FINANCIAL STATEMENT)

1.	Vacation, Holiday, and Sick Leave	\$15,726
2.	Training	\$1,593
3.	Health and Insurance Program	\$2,975
4.	Payroll Taxes	\$17,734
5.	Pension, Retirement Plans	\$0
6.	Travel	\$5,618
7.	Reproduction	\$263
8.	Commissions and Bonuses	\$0
9.	Advertising for A/E Services	\$349
10.	Contributions to Historic Building Fund	\$525
11.	Dividend Payment	\$0
12.	Entertainment	\$1,045
13.	Interest on Borrowings	\$6,801
14.	Income Taxes	\$7,806
15.	Bad Debts	\$935
16.	Losses	\$0
17.	Fines and Penalties	\$482
18.	Typing, Filing	\$409
19.	Salaries of Principals	\$32,950
20.	Salaries of Technical Personnel (indirect)	\$48,153
21.	Accounting	\$3,422
22.	Dues (Licenses and dues to professional organizations)	\$3,757
23.	Office Equipment Lease	\$122
24.	Telephone and Telegraph	\$5,016
25.	Subscriptions and Periodicals	\$0
26.	Depreciation - Office Equipment	\$13,372
27.	Office Rent	\$45,207
28.	Utilities	\$4,005
29.	Maintenance and Repair	\$2,356
30.	Automobile	\$0
31.	Others (explain)	
	Postal/Deliver	\$2151
	Other Office Expenses	\$5301
	Legal Fees	\$400
	Professional liability	<u>\$32,059</u>

Total Overhead

\$ 39,911
\$260,532

Direct Labor

\$170,282

OVERHEAD RATE $\$260,532 / \$170,282 =$ **153%**

CLASSROOM EXERCISE CE-4.3

GENERAL WAGE RATES

In the absence of historical wage rates or rates from other sources, the rates in this Exhibit may be used when analyzing A-E professional wage rates in a proposal. The salary structures reflect the ranges of the respective GS ratings. The suggested hourly rate is the average hourly rate to the nearest quarter dollar. Data is from the January 1988 Federal Pay Schedule.

A. PROFESSIONAL GRADE: VII EQUIVALENT: GS-15

(1) Duties and Responsibilities - Supervision and direction, with final administrative authority, a large engineering or research organization comprising major divisions; determines policies; establishes and administers procedures; final responsibility for operation of organization; etc.

(2) Typical Position Title - Chief Engineer; Director of Research; Dean of School of Engineering; etc.

(3) Salary Structures -

(a)	Government equivalent	\$54,907	to	\$71,377
(b)	Government hourly rates	\$26.41	to	34.33
(c)	Suggested hourly rate			30.00

B. PROFESSIONAL GRADE: VII EQUIVALENT; GS-14

(1) Duties and Responsibilities - Supervise and direct, with final administrative authority, a large engineering research, or technical operation of the organization, etc.

(2) Typical Position Title - Chief or Assistant Chief Engineer; Manager of Engineering; Director of Research; Department Head in School of Engineering; etc.

(3) Salary Structures -

(a)	Government equivalent	\$46,679	to	\$60,683
(b)	Government hourly rates	22.45	to	29.19
(c)	Suggested hourly rate			26.00

C. PROFESSIONAL GRADE: VI EQUIVALENT: GS-13

(1) Duties and Responsibilities - Plan, direct, or supervise work of major engineering unit is design and research, usually in a particular branch of engineering; manages small organization, or a major design or research division in a particular engineering field; assumes professional and executive responsibility, etc.

(2) Typical Position Title - Division or District Engineer; Production Engineer; Principal Engineer; Full Professor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$39,501	to	\$51,354
(b)	Government hourly rates	19.00	to	24.70
(c)	Suggested hourly rate			22.00

D. PROFESSIONAL GRADE: V EQUIVALENT: GS-12

(1) Duties and Responsibilities - Performs important engineering requiring special qualifications with wide latitude for action and decision; plans, directs, and supervises design of major projects; supervises preparation of specifications and contracts; performs comprehensive research and testing; etc.

(2) Typical Position Title - Project or Senior Engineer; Senior Test or Process Engineer; Associate Professor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$33,218	to	\$43,181
(b)	Government hourly rates	15.98	to	20.77
(c)	Suggested hourly rate			18.00

CLASSROOM EXERCISE CE-4.3

E. PROFESSIONAL GRADE: IV EQUIVALENT; GS-11

(1) Duties and Responsibilities - Engineering assignments under general direction; responsible for choice in making decisions and interpretations; design; write specifications from guides or instructions; plans tests and processes to obtain specific results; etc.

(2) Typical Position Title - Project Engineer; Design Engineer; Chief Draftsman; Research Engineer; Assistant Professor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$27,716	to	\$36,032
(b)	Government hourly rates	13.33	to	17.33
(c)	Suggested hourly rate			15.00

F. PROFESSIONAL GRADE: III EQUIVALENT; GS-09

(1) Duties and Responsibilities - Basic application of engineering fundamentals to engineering work; under direction; but not immediate supervision; limited choice of action; select and recommend procedures in design and research; writes specifications from guides; perform higher grade drafting; prepare technical reports; etc.

(2) Typical Position Title - Senior Engineering Assistant; Senior Draftsman; Design Draftsman; Senior Inspector; Instructor in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$22,907	to	\$29,783
(b)	Government hourly rates	11.01	to	14.35
(c)	Suggested hourly rate			13.00

CLASSROOM EXERCISE CE-4.3

G. PROFESSIONAL GRADE: II EQUIVALENT; GS-07

(1) Duties and Responsibilities - Basic working knowledge of engineering fundamentals in a particular field, under immediate supervision or direction; make and check quantity estimates; detail drawings from design by others; perform routine tests; sets up process equipment; records and compiles test data; etc.

(2) Typical Position Title - Engineering Assistant; Checker; Quantity Estimator; Engineering Draftsman; Lab Assistant; Assistant in School of Engineering; etc.

(3) Salary Structure -

(a)	Government equivalent	\$18,726	to	\$24,342
(b)	Government hourly rates	9.00	to	11.70
(c)	Suggested hourly rate			10.35

H. PROFESSIONAL GRADE: I EQUIVALENT; GS-05

(1) Duties and Responsibilities - Routine tasks requiring knowledge of engineering fundamentals in a particular field; under close and immediate supervision; compiles data; computes quantities; traces; performs simple drafting; makes and records observations; etc.

(2) Typical Position Title - Draftsman; Detailer; Engineer Assistant; etc.

(3) Salary Structure -

(a)	Government equivalent	\$15,118	to	\$19,654
(b)	Government hourly rates	7.27	to	9.45
(c)	Suggested hourly rate			8.00

I. CLERICAL - TYPING POSITIONS: EQUIVALENT: GS-04

Suggested hourly rates for typists correspond to hourly rates for Government personnel at GS-04 level, which average at about \$7.50 hour. Remember that skilled word processor operators receive higher hourly rates BUT work proportionately FASTER.

CLASSROOM EXERCISE CE-4.3

QUESTIONNAIRE

After reviewing the proposal submitted by the A-E, answer the following questions:

1. After reviewing the proposal, do you believe that the A-E thoroughly understands the scope?

YES ____ NO ____

Explain: _____

2. How would you generally classify this project as to risk?

____ Simple

____ Difficult

____ Routine

____ Very complex

3. What about period of performance? Is there risk involved?

YES ____ NO ____

Explain:

4. What is the contract type? _____

5. Are there any mathematical errors?

YES ____ NO ____

6. In comparing the number of drawings and estimate of hours, do the figures match when compared with the scope?

YES ____ NO ____

CLASSROOM EXERCISE CE-4.3

QUESTIONNAIRE (Cont.)

7. Using the information provided concerning the Government General Wage Rates and comparing the figures to the A-E's proposal, do the wages under Section A. Design seem reasonable?

YES ____

NO ____

8. Review the listing on the Overhead Analysis form. Identify any unallowables or questionable items.

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

9. Does the overhead rate of 153% appear to be reasonable?

YES ____

NO ____

10. Will a cost and price certification be required at the conclusion of negotiations?

YES ____

NO ____

11. Is an audit required?

YES ____

NO ____

12. Does the A-E proposal exceed the 6% Fee limitation?
-

CLASSROOM EXERCISE CE-4.3

INSTRUCTOR'S KEY

NOTE: Have each group present answers for 3 questions; ask other groups if they agree, disagree, or have additional information.

1. It appears that the A-E has a good understanding of the scope with the exception that there are no costs attributed to landscaping. This should be questioned.
2. In assessing risk, this project should be classified as "Routine."
3. The period of performance could result in some risk because of the short lead time the contractor has to produce the design. This can often lead to errors and/or omissions. The A-E is also likely to include contingencies buried in this estimate.
4. The contract type should be Firm Fixed Price.
5. There are 3 mathematical errors:
Section A: $[\$51,434 + 78,694 + 12,763 = \$142,890, \text{ not } \$132,890.]$
Section C: $[\$80 \times 14.00 = \$1120, \text{ not } \$252]$
Section E2c: $[\$410 \text{ for Drawings not included}]$
6. In comparing the number of drawings and estimated number of hours in Section A of the proposal, the figures appear to be reasonable.
7. The wage rates specified in Section A are high when compared to the comparable Government Wage rates except for Project Engineer (A) and Architect (B). Also note that wage rate for "B" does not include job title of "architect."
8. The unallowables and questionable items in the Overhead analysis are as follows: (See OH Analysis Form.)

Advertising for A/E Services	Income Taxes
Contribution (to a Historic Building)	Bad Debts
Entertainment	Fines and Penalties
Interest	
9. Because of unallowable or questionable costs, the overhead rate is probably a little high.
10. A cost and price certification is not required since the proposed cost is not over the threshold of \$500,000.
11. An audit is not required because the proposal does not exceed the \$500,000 threshold.
12. The percentage attributed to designing services is 5.65% which is derived by dividing the total design costs shown in Section A by the ECC. ($\$132,875 \text{ divided by } \$2,350,000 = 5.65\%$). This is well under the 6% threshold.

However, the \$132,875 figure is incorrect (See #5 above). When the correct amount of \$142,875 is used, the percentage attributed to designing services rises to 6.08%, which exceeds the 6% threshold. Ask the class "What alternatives does the contracting officer have?"

TOPIC: 4.4 PREPARE FOR NEGOTIATIONS



Ref: Text/Reference Pages 4-29 through 4-30

Objective: Upon completion of this lesson, the students should be able to prepare for negotiations by establishing objectives, set dates for negotiation and notify all participants, conduct negotiations, and prepare a Price Negotiation Memorandum.




Time: 3:00 - 3:10




Method: Group Discussion, Lecture

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Tell the students: "We are now ready to prepare for negotiations."	
	<u>Question:</u> Ask the class what is meant by <u>preparing</u> for negotiations? Haven't we already prepared for negotiations when we reviewed the Government Estimate and the A-E's proposal? <u>Answer:</u> Yes, the review is part of the preparation. However, there is more to it than that: We must establish objectives and prepare a prenegotiation position. (Whatever your agency chooses to call this document, the contents will be similar.) We must also anticipate what position the A-E is likely to take in negotiation. In other words, evaluate your bargaining position. Your agency may also require review and approval of your position from a higher authority before you can negotiate.	

FAR 15-808

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Question: What distinguishes good prenegotiation objectives?</p> <p>Answer:</p> <ul style="list-style-type: none"> • Explanation of why a contract action is necessary. (New procurement vs. modification). • Demonstration that all clearances and authorities have been obtained. • Justification of all differences between the prenegotiation position (PNP) and Government estimate. • Inclusion of cost analysis and price analysis spreadsheet. • Outline of negotiation strategy for resolving differences between PNP and the A-E proposal. 	
	<p>Pre-negotiation preparation is essential to:</p> <ol style="list-style-type: none"> ① Develop strategy. ② Identify tactics ③ Develop an agenda to discuss the differences with the A-E. ④ Establish criteria for concessions. ⑤ Establish a fall back position. 	
	<p>Pre-negotiation preparation is essential to:</p> <ol style="list-style-type: none"> ① Develop strategy. ② Identify tactics ③ Develop an agenda to discuss the differences with the A-E. ④ Establish criteria for concessions. ⑤ Establish a fall back position. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Before entering into negotiations with the A-E, clear cut decisions must be made beforehand as to which objectives:</p> <ul style="list-style-type: none"> • Cannot be compromised under any circumstances. • Can be compromised, and to what extent, and in exchange for what. 	
	<p><u>Question:</u> What are some other important factors that must be considered?</p> <p><u>Possible Answer:</u></p> <ol style="list-style-type: none"> 1. A-E's needs or desire for work. 2. Time pressure on the Government and the A-E to obtain agreement. 3. Legal and political pressures. 4. Public opinion as it affects the reputation of the parties concerned. 	
	<p>Tell the students:</p> <p>On large complex construction projects, restoration projects or rehabilitation projects, a <u>pre-negotiation meeting</u> can be an effective method to insure A-E understanding of the complete contract requirements.</p> <p>The meeting should be held after the A-E representative has had an opportunity to visit the site. During the pre-negotiation meeting, the following items are reviewed and discussed in detail. (The cost of the project should not be discussed at the conference.)</p> <ul style="list-style-type: none"> • Standard contract provisions. • Scope of services. • Authority of contracting officer. • Cost proposal preparation. • Construction cost limitation. • Consultants and key personnel. • Audit and Cost & Pricing requirements. • Payments. 	

TOPIC: 4.5 NEGOTIATE




Ref: Text/Reference Pages 4-31 through 4-33




Objective: At the completion of this lesson students should be able to serve as chairperson for an A-E negotiation which results in a fair and reasonable price for the Government, or if not, to take appropriate action.

Time: 3:10 - 3:25

Method: Group Discussion, Lecture, Viewgraphs

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> When should negotiations be held?</p> <p><u>Answer:</u> As soon as possible, but allowing sufficient time for preparations. "Haste makes waste," and will result in the negotiation team being ill prepared.</p>	
	<p><u>Question:</u> Where should it be held?</p> <p><u>Answer:</u> There are advantages and disadvantages to meeting the A-E on its own turf or at the Government's office or even at the site. Agency policy or practice will most likely dictate.</p>	
	<p><u>Question:</u> Who will negotiate?</p> <p><u>Answer:</u> The contracting officer, or a duly appointed representative will chair the negotiations.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the students:</p> <p>The day you have all been waiting for has arrived. The feeling is similar to that of the feeling a basketball player or the football player has in anticipation of an upcoming game. You and your teammates have:</p> <ul style="list-style-type: none"> • Received proper training. • Made all of the necessary preparations. • Studied your opponent's possible strategy. • Formed your own strategy. • Established goals, and • Surrounded yourself with motivated and knowledgeable team members. <p>There is one major difference however.</p> <p>In a competitive game, such as football or basketball, the RESULT WILL BE A WIN/LOSE situation, with hopefully, YOU as the winner and your opponent the LOSER.</p> <p>In a successful A-E negotiation, we strive for a WIN/WIN outcome.</p>	
	<p><u>Question:</u></p> <p>What do we mean when we say we strive for a WIN/WIN outcome? Can both parties be winners?</p> <p><u>Answer:</u></p> <p>Both parties walk away from the table with a winning attitude. It is called the integration approach. The concept is that both parties are satisfied with the agreement.</p>	
	<p>There are three possible outcomes to any negotiation.</p> <p>Show Viewgraph 4-15:</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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NEGOTIATION EFFECT

<i>Approach</i>	<i>Outcome</i>	<i>Result</i>
Maximize	Win/Lose	Renegotiation
Compromise	Lose/Lose	Dissatisfaction
Integration	Win/Win	Satisfaction

VG 4-15



There have been many books and articles written about techniques of negotiation. Most agree as to what preparations must be made, but here the similarities end. There are also many training courses available. In this training course, we are going to discuss only specific techniques recommended for A-E negotiations.

Tell the students:

"In earlier discussions it was brought out that a negotiation agenda should be prepared. The negotiation agenda should be similar to that shown in the following viewgraph.



Show Viewgraph 4-16, entitled "NEGOTIATION AGENDA."

NEGOTIATION AGENDA

1. INTRODUCTIONS
2. DIRECT LABOR EFFORT FOR DESIGN (6%)
3. DIRECT LABOR EFFORT FOR OTHER THAN DESIGN SERVICES.
4. COST REIMBURSABLE POOLS
 - TRAVEL AND PER DIEM
 - SITE INVESTIGATION
5. GENERAL & ADMINISTRATIVE COSTS (G&A)
6. PROFIT

VG 4-16

Following the introductions, follow the procedures described in the Text/Reference on page 4-34.



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 275 272 352" data-label="Image"></div>	<p><u>Question:</u> It's a good idea to start negotiations by talking about the things you <u>DO AGREE ON</u>. Suppose you are fairly close in the overall bottom line figure, but comparison of costs item-by-item reveals some wide variances. Is it "worth it" to proceed with an item-by-item analysis?</p> <p><u>Answer:</u> Probably. However, do not expect to agree on every single element of cost. Cost and accounting data are not rigid measures for determining fair compensation. Do not allow yourself to become bogged down by haggling over every line item. Judgment is crucial, but it is an inexact science.</p> <p>Next, discuss the items that you <u>DO NOT AGREE ON</u>, perhaps, for example:</p> <ul style="list-style-type: none"> • Direct labor issues. • Other engineering services and other effort that is a direct cost. • Indirect costs, separating the G&A from Overhead • Profit. 	
<div data-bbox="191 1188 272 1266" data-label="Image"></div>	<p><u>Question:</u> How do you go about identifying items for which you are, or are not, in agreement with?</p> <p><u>Answer:</u> During the preparation for negotiation, you should have identified direct labor costs by the comparison of each task, making note of the salaries of each discipline, multiplied times the estimated number of manhours required.</p> <p>Other services are also compared. Using percentages, you can determine how far apart you are on each task.</p> <p>The Government normally uses comparison charts on direct labor costs on a per hour basis for the Government estimate, whereas the A-E will have actual figures to back up its direct costs on an hourly basis. The number of manhours estimated for effort is judgmental.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>One of the distinct differences in A-E negotiations is in the manner in which cost of design is measured. <u>The cost of production of a design is directly relatable to the number of drawings the A-E will be required to produce</u>, broken down by discipline, as is the number of manhours required to produce those drawings. The number and type of drawings to be produced will have a direct bearing on the number of man-hours required.</p> <p>Therefore, this is usually the <u>first element for discussion</u>. Once an agreement is reached on the number and type of drawings, the costs of certain other services outside of the design portion (, i.e. reproduction, costs of mail outs, etc.) can be determined as they are based on the number of drawings to be produced.</p> <p>In other than computer aided design (CAD) which is only used in large complex projects, the <u>rule of thumb</u> used to arrive at an estimate consists of establishing a ratio, such as 60 hours of engineering for 40 hours of drafting per drawing which is required for a particular project. (Based also on whether the drawings are complex, simple, or in-between) This figure is then used to discuss and negotiate the manhours required.</p>	
<div data-bbox="191 1192 272 1266" data-label="Image"> </div>	<p><u>Question:</u></p> <p>If the A-E has used actual per hour cost figures for its direct labor, wouldn't the Government have to accept this figure?</p> <p><u>Answer:</u></p> <p>No. The per hour cost is a variable. For instance, the A-E may have <u>overestimated</u> the complexity of the design effort and may be planning to use a high salaried individual who is considered an expert in his/her field, when a lower salaried, less experienced engineer would suffice.</p> <p>Also remember that if the A&E's proposal reflects a more <u>complex project</u> than that viewed by the Government, the result may be a higher profit figure by the A-E, based on risk.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"></div>	<p><u>Question:</u> Suppose you have an audit that recommends a G&A figure below that which the A-E has proposed. Do you tell the A-E that you cannot exceed that recommended by the auditor?</p> <p><u>Answer:</u> No. Remember that the audit represents advisory information only. Even if the auditor endorses the A-E's G&A, high rates are always negotiable.</p>	
<div data-bbox="191 768 272 852" data-label="Image"></div>	<p><u>Question:</u> What if you don't have the advantage of an audit as a recommended figure?</p> <p><u>Answer:</u> If you do not have an audit, then you must become the expert. One of the things that makes A-E negotiations different than other negotiations is the lack of factual data from which to establish a position.</p> <p>Once you progress in negotiations past the average manhour rates and the direct costs and have established the allowable and allocable indirect costs, everything else is judgmental. (With the exception that there is a 6% dollar cap on the design portion.)</p> <p>There are 3 cardinal rules that must be followed; You <u>cannot award</u> an A-E contract:</p> <ol style="list-style-type: none"> ① In excess of the Government estimate. ② If the design costs exceed 6% of the ECC. ③ Unless the price is determined to be fair and reasonable. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"> </div>	<p data-bbox="332 300 490 338"><u>Question:</u></p> <p data-bbox="332 342 1079 426">What if you discover during the course of negotiation that <u>either</u> the</p> <ul data-bbox="342 447 1079 716" style="list-style-type: none"> • Government estimate is in error, or • even if the Government estimate is NOT in error, that the A-E's fee proposal represents a fair and reasonable amount for the work to be performed, but does not agree with the Government estimate? <p data-bbox="332 737 597 774">What can you do?</p> <p data-bbox="332 800 470 837"><u>Answer:</u></p> <p data-bbox="332 842 1079 1014">The A-E's proposal can be accepted as annotated by modifications made in the course of negotiation, provided it is fully documented in the PNM Remember that it must be obvious to anyone reviewing the PNM the changes that have transpired.</p> <p data-bbox="332 1031 1079 1165">If attaching the original Government estimate to the PNM, along with one which includes the revisions, provides added assurance that it will be understood, then do so.</p> <p data-bbox="618 1236 792 1274" style="text-align: center;">OPTIONS</p> <p data-bbox="332 1316 1079 1417">Another peculiar element of negotiating an A-E contract, is the frequency with which options become part of the negotiation.</p> <p data-bbox="332 1455 1010 1488">Additional services can be obtained by three methods:</p> <ol data-bbox="358 1493 1079 1661" style="list-style-type: none"> ① Options. (Usually prepriced) ② Phases (Pricing not feasible) ③ Separately priced line items or services to be identified and negotiated at a later date. (i.e., In-scope modification). <p data-bbox="332 1690 1079 1757">By far the most popular method used to provide additional services in an A-E contract is the use an option.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"> </div>	<p data-bbox="331 300 490 338"><u>Question:</u></p> <p data-bbox="331 344 1078 422">Under what circumstances are options negotiated in an A-E contract?</p> <p data-bbox="331 499 470 537"><u>Answer:</u></p> <p data-bbox="331 541 1078 674">An option is a unilateral right to order additional priced services. Options are included in architect-engineer contracts, when it is in the Government's interest.</p> <p data-bbox="331 709 956 747">Usually there are one of two elements present:</p> <ul data-bbox="355 764 1078 898" style="list-style-type: none"> • Government does not have funds at the time of award, or • It cannot be determined until well into design if additional services are needed. <p data-bbox="331 934 831 972">Options should never be used when:</p> <ul data-bbox="355 989 1078 1161" style="list-style-type: none"> • It is apparent that the A-E will incur undue risks. • Price or availability of materials or labor is not reasonably foreseeable. • An Indefinite Delivery contract would be more appropriate. <p data-bbox="331 1197 1078 1329">The most common example of option usage in an A-E contract is the IDQ A-E contract which is established for a one year period with an option for an additional year, or years.</p> <p data-bbox="331 1365 1034 1402">Other situations where options are commonly used:</p> <ul data-bbox="355 1419 1078 1522" style="list-style-type: none"> • Going from 35% design to 100% design. • Additional like design services following successful design of one project. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> There is one other factor concerning options that remains peculiar to A-E contracts. What is it?</p> <p><u>Answer:</u> The period for exercising an option may extend beyond the performance period of the basic A-E contract.</p> <p style="padding-left: 40px;">This is especially true in design contracts that include the concept design portion as the basic, and the performance of the final design as an option.</p> <p>Tucked away neatly in the contract will be an option exercise date.</p> <p>You may give as an example:</p> <p>"All work and services under appendix A of this contract shall be completed by 1 July 1993, and the overall contract completion date is 1 November 1993. The optional services may be exercised on or before 1 November 1993, and if exercised, the overall contract completion date will be extended to 1 August 1994."</p>	
 FAR 15.804-4	<p><u>Question:</u> After an agreement has been reached on all issues, and all of the elements agreed upon are reviewed with the A-E, you have one more task to perform. What does that consist of?</p> <p><u>Answer:</u> Obtain a Certificate of Cost & Pricing Data. The certificate states that the cost or pricing data are accurate, complete, and current as of the date the A-E and the Government agree on the price.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 294 272 373" data-label="Image"> </div>	<p><u>Question:</u> Throughout this lesson we have discussed only negotiations which were ultimately successfully completed. What about the situation of a negotiation in which you fail to reach an agreement? What happens?</p> <p><u>Answer:</u> The contracting officer, when it becomes obvious that an agreement cannot be reached, simply cancels negotiations, and contacts the firm next in line [according to the Board's rankings] to start the negotiation process once more.</p> <p>The file is fully documented as to what transpired leading up to the necessity of abandoning efforts to reach an agreement.</p>	

TOPIC: 4.6 OBTAIN APPROVALS AND ISSUE CONTRACT





Ref: Text/Reference Pages 4-34 through 4-35

Objective: At the conclusion of this lesson the student should be able to proceed with obtaining all of the approvals necessary prior to issuing a contract.

Time: 3:25 - 3:30

Method: Group Discussion, Lecture

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> What kinds of approvals must be obtained?</p> <p><u>Answer:</u> Local and agency policy will dictate some of the procedures which must be followed.</p>	
 	<p><u>Question:</u> Solicit the class to provide a list of actions required prior to award.</p> <p><u>Answers:</u></p> <ol style="list-style-type: none">① PNM approval.② Receipt of Certificate of Cost & Pricing Data.③ Subcontracting Plan.④ EEO Preaward Clearance (If required).	
	<p><u>Question:</u> What is the EEO Preaward Clearance?</p> <p><u>Answer:</u> An EEO Preaward Clearance by the Office of Federal Contracts Compliance is required when an award fee of \$1 million or more is to be made. Remember that this applies to Indefinite Quantity Contracts based on the total estimated dollars to which the Government may award, including option years.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
FAR 5.303 and 5-401	<p>As with other contracts, once all of the required actions are complete,</p> <ul style="list-style-type: none"> • you must prepare a <u>synopsis</u> of award, and • after award you may <u>release award information</u>. 	

TIME TO ANSWER TIM'S QUESTIONS

Now that this lesson is complete, let us return to the questions which were introduced by Tim, the contract specialist at the beginning of the chapter. Provide the class an opportunity to answer the questions making sure that all of the main points are covered. (*The instructor will list the responses on the blackboard opposite the questions which were annotated on the blackboard at the beginning of the lesson*).

1. What are the tasks that have to be accomplished before you can sit down and negotiate?

- Request an audit if required.
- Form negotiation team.
- Analyze the Government estimate.
- Analyze the A-E's proposal.
 - Determine profit.
 - Identify unallowables.
- Analyze the audit.
- Develop prenegotiation objectives.
- Determine strategy, including fall back..
- Estimate the A-E's strategy.
- Determine where and when negotiations will be held.

2. What approvals have to be obtained before an award can be made?

- Certificate of cost and pricing data.
- Price Negotiation Memorandum.
- Subcontracting plan .
- EEO preaward.
- Funding obtained.
- Any local or agency requirements.

3. What happens if you can't negotiate a fair and reasonable price with the A-E selected?

- Abandon the negotiation and move on to the next A-E on the ranking list.

You can see that as a contract specialist, Tim was not a knowledgeable or trained individual, which is reflected in the type of questions which he asked. It is fortunate that he has since been enrolled in this class, and can answer with ease all three of the questions.

LESSON PLAN

CONTRACT ADMINISTRATION

CHAPTER 5

TIME	LESSON	OBJECTIVES
8:00 - 8:05	5.0 A-E Contract Administration	
8:05 - 8:20	5.1 Develop Contract Administration Plan	Develop a complete plan which assures that an Agency will meet its goals.
8:20 - 8:30	5.2 Conduct Post Award Orientation	Cover all topics necessary for A-E to have a complete understanding of its duties.
8:30 - 9:30	5.3 Monitor, Inspect, & Accept A-E Services	<ul style="list-style-type: none">• Achieving quality• Processing progress payments
9:30 - 9:50	B R E A K	
9:50 - 10:00	5.4 Select Appropriate Remedy	<ul style="list-style-type: none">• A-E specific clauses• Terminations
10:00 - 10:30	Exercise 5.4	
10:30 - 10:35	5.5 Issue Delay or Suspension	<ul style="list-style-type: none">• Recognize how delays can occur• Avoid constructive delay situations
10:35 - 10:45	5.6 Negotiate Contract Modifications	Perform all contractual actions for the issuance of a modification.
10:45 - 11:15	Exercise 5.6	
11:15 - 11:35	5.7 Closeout Contract	Perform all actions necessary to close out an A-E file, including SF 1421.
11:35 - 12:00	Exercise 5.7	
12:00 - 1:00	L U N C H	
1:00 - 3:00	E X A M	

LESSON PLAN

LESSON TOPIC GUIDE

FEDERAL ACQUISITION INSTITUTE

TOPIC: 5.0 A-E CONTRACT ADMINISTRATION

Ref: Text/Reference, Pages 5-1 through 5-4


Objective: The student will administer an A-E contract, performing the required functions in successfully achieving all three objectives as follows:


- Quality Design.
- Within Budget.
- On Time.

Time: 8:00 - 8:05

Method: Lecture, Discussion

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Overview and Objectives of Chapter 5.</p> <p>Tell the Class:</p> <p>It is ironic that contracting officers will plan every preaward aspect of a project down to the finest level of detail, but spend little time planning for the project after award of the contract. This is especially true in A-E contracting where the contract provides for an automatic schedule for progress in the submittal requirement. Yet, without proper planning, it is unlikely that the objectives of the project will be met in obtaining a QUALITY DESIGN which is received ON TIME, and WITHIN BUDGET.</p> <p>This lesson is not only about planning, but about all tasks associated with the actual administration of the A-E contract. It is also about obligations and the responsibilities of both parties.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Today we will have short exercises on determining 6% fee limitation when modifying the contract and take a look at a SF 1421, Performance Evaluation.</p>	
	<p>Presentation:</p> <p>Refer the students to the vignette on page 5-1. Ask them “What are Jerry’s concerns now that the contract has been awarded?”.</p> <p>Go over the questions, explaining that the answers will be provided as the lesson unfolds.</p>	<ol style="list-style-type: none"> 1. What is required to administer an A-E contract? 2. What is the difference in administering a supply or construction contract? 3. How is progress measured? 4. Is a conference held much the same as in a construction contract? 5. How are progress payments made? 6. What about delays, suspensions, mods and terminations? 7. What about evaluating quality of the work?

TOPIC: 5.1 DEVELOP A CONTRACT ADMINISTRATION PLAN

Ref: Text/Reference, Pages 5-5 through 5-6




Objective: Upon receipt of an A-E contract develop a comprehensive plan for the administration of the contract that will assure the Government's three objectives are met in excellence, timeliness and within budget.

Time: 8:05 - 8:20

Method: Lecture, Discussion

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>The longer and more complex the project, the more time we need to spend planning for contract administration with its loosely defined objectives that often extend over a period of time.</p> <p>The major purpose of planning should be to divide broad contractual goals into <u>manageable tasks</u> that can be performed in relatively short periods of time.</p> <p>Proper planning also provides the contracting officer with a <u>yardstick to use in measuring the A-E's progress and control of the project.</u></p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> What would be one of your first acts of contract administration if you were the contracting officer?</p> <p><u>Answer:</u> Allow some discussion among the students. List on the blackboard their answers. There is no exact answer; the list below should be representative of their answers.</p> <ol style="list-style-type: none"> ① Read the contract and thoroughly understand the scope and the contract requirements. ② Identify all individuals who will be involved in the planning and the administration of the contract. ③ Identify: <ul style="list-style-type: none"> - What is to be done. - When is it to be done. - Who will do it. - How it will be done. ④ Plan a conference with the A-E. ⑤ Plan a site visit. 	
	<p>Tell the students to turn to their Text/Reference, Exhibit 5-1, (Page 5-6) - entitled "Ingredients of Successful A-E Management and Administration" (A copy is provided on the following page).</p>	
	<p><u>Question:</u> Ask the students to describe the difference between <u>Management</u> of a contract and <u>Administration</u> of a contract?</p>	

INGREDIENTS OF SUCCESSFUL A-E CONTRACT MANAGEMENT AND ADMINISTRATION




- **Management vs. Administration:** Contract project managers are primarily responsible for overall technical management of the contract, i.e., acquisition planning, customer and contractor interface on technical matters, drafting scopes of work, quality assurance, etc.

Contract administrators perform contractual functions and provide contractual assistance/information for use during performance.
- **Attitude:** An active rather than a reactive posture is most important for success in A-E contract management. Prevent problems rather than wait and remedy them. The contract manager must be relentlessly vigilant to anticipate project requirements and assure that the resources are available in time for the uninterrupted progress of the project. The active position is achieved in the Partnering concept.
- **Organization:** The effective contract manager organizes the progress of the project as a whole as well as addressing each individual task within the project such as
 - flow in human and material resources,
 - scheduling & funding (i.e. targets events and targets dates), and
 - procedural and legal requirements.
- **Timeliness of Decisions:** Effective contract managers and administrators demonstrate their ability to foresee and prepare timely decisions. Very often the single most important cause of project delays or cost overruns is the lack of timely response by the Government to legitimate queries of either the A-E or the construction contractor during the life of the project. Foresight and preparation are essential.
- **Familiarity with Project Data:** Thorough familiarity with the details of the project scope, regulations and facts covering the project is the basis upon which effective management rests. First achieve familiarity with the A-E Scope of Work (Statement of Services).
- **Communication:** Clear, continuous and orderly flow of communications between the contract manager and the A-E contractor is vital to the success of the project. Communication should be cordial and tend to enhance the spirit of overall team work. However, the division of roles and responsibilities between the Government segment of the overall team and the A-E contractor segment of the team must be clear-cut and well understood by all parties.
- **Monitoring Target Dates:** Sometimes it becomes impossible to meet target dates. When this occurs, the manager evaluates the consequences of missing the target, revises targets, and notifies everyone impacted, including management, of all the consequences as early as possible. If the dates involve a contractual requirement a modification to the contract will be necessary.

Exhibit 5-1

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Answer:</u> An A-E contract project manager is primarily responsible for overall technical management of a contract, which includes:</p> <ul style="list-style-type: none"> • Planning. • Customer and contractor interface on technical matters. • Drafting scopes of work. • Quality assurance requirements, etc. <p>The contract administrator performs contractual functions and provides contractual assistance and information for use during performance.</p> <p>The contracting officer's duties consist of a combination of the two. From the list of management duties, the contracting officer performs the first two listed, as well as all of the administration duties.</p> <p><u>Question:</u> What is meant by “<u>Attitude</u>” being an ingredient of good administration?</p> <p><u>Answer:</u> The contract administrator must assume an "active" rather than a "reactive" posture. <u>Prevent problems</u>, rather than allowing them to occur.</p> <p>The 3rd item in the exhibit is <u>Organization</u>, or management of the contract as a whole:</p> <ul style="list-style-type: none"> • Dividing broad contractual goals into manageable tasks, • Tracking those tasks, • Monitoring funds when change orders are executed, • Monitoring of the A-E's progress by making on site visits, and • Frequently talking to the A-E in person or by telephone. 	



REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> <u>Timeliness of Decisions</u> is listed as a necessary ingredient. What type of timely decisions are we talking about?</p> <p><u>Answer:</u> The A-E may frequently seek clarifications during the design phase, or decisions may be required on various problems as they arise. Prompt replies are essential.</p>	
	<p><u>Question:</u> The next item in the exhibit is "<u>Familiarity with Project Data</u>." This is probably the most important element contained in the list. How do you go about becoming <u>familiar</u> with the project?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • By studying the scope of work. • By visiting the site. • By meetings and discussions with the Project Manager and design/construction experts in your organization. <p><u>Communication</u> is listed as an ingredient for success. It means linking all parties together and providing a clear, continuous and orderly flow of communications between the A-E, yourself, and the Project Manager/Design/Construction personnel.</p>	
	<p><u>Question:</u> The last item is <u>Monitoring Target Dates</u>. How is this usually done in an A-E contract?</p> <p><u>Answer:</u> Examples:</p> <ul style="list-style-type: none"> - Milestone Charts, - Bar Charts, - Project Management Software. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Some agencies require the A-E to submit monthly progress reports. The report is normally limited to two or three pages and addresses work accomplished, work planned for the following month, and an outline of problems and proposed solutions.</p>	

TOPIC: 5.2 CONDUCT POST AWARD ORIENTATION

Ref: Text/Reference, Pages 5-7 through 5-9


Objective: Conduct a post award orientation which includes all of the topics for discussion that are necessary for the A-E to have a complete understanding of its responsibilities in fulfilling the contract requirements.

Time: 8:20 - 8:30

Method: Lecture, Discussion

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div><div>?</div></div>	<p><u>Question:</u> What is the purpose of the post award conference?</p> <p><u>Answer:</u> The purpose is three-fold.</p> <ol style="list-style-type: none"><u>1. For the A-E</u> it provides guidance, information, and a chance to discuss any problems, ask questions regarding scope, procedures, etc.<u>2. For the Government</u>, it provides an opportunity to discuss quality assurance plans and inform the A-E as to persons who will be interfacing with the firm, describing the chain of command and authorities.<u>3. For both parties</u> it provides an opportunity to meet face to face and sets the tone of things to come. Sometimes post award orientation is conducted in conjunction with negotiation on smaller contracts. <p>Stress to all class members that adequate, responsible A-E orientation is a basic step toward design quality. It begins at the predesign orientation meeting and continues throughout the life of the contract.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Three basic essentials must be covered at the conference.</u> You must</p> <ol style="list-style-type: none"> 1. Communicate your expectations clearly and on a continual basis; inform the contractor that the firm's progress will be monitored against the stated expectations. 2. Stress the Government's objectives of achieving: <ul style="list-style-type: none"> • Quality Design, • Within Budget, and • On Time. 3. Discuss quality assurance and the architect-engineer's quality control plan. <p>Minutes must be provided to all parties.</p>	

TOPIC: 5.3 MONITOR, INSPECT, & ACCEPT A-E SERVICES



Ref: Text/Reference, Pages 5-10 through 5-29

Objective: Perform all tasks associated with tracking, receiving, and processing submittals as they occur.

Time: 8:30 - 9:30
9:30 - 9:50 BREAK

Method: Lecture and Discussion, Viewgraphs


LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the class:</p> <p>The A-E has the responsibility and obligation to provide a usable set of plans and specifications to fulfill the purpose of the A-E contract scope of work.</p> <p>The contracting officer has the responsibility to enforce the contract's terms and conditions, holding the A-E responsible for providing plans and specifications which are free from errors and omissions. This is accomplished by means of frequent monitoring, as well as by inspection.</p>	
	<p>Question:</p> <p>What is meant by "monitoring" a contract?</p> <p>Answer:</p> <p>Monitoring is a less formal form of review. Webster defines it as "observing." It takes place informally and intermittently as design progresses. It can have several forms and serve various purposes. At given intervals, you may need to observe the A-E at work in his/her own environment. This not only allows you to evaluate progress, but more importantly, provides you an opportunity to acquaint yourself with the A-E's personnel, methods and standards; thus providing you with informal measurements of both progress and quality.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 300 272 380" data-label="Image"> </div>	<p><u>Question:</u> How can you "inspect" an A-E contract when there is nothing to "inspect" except plans and specification submittals?</p> <p><u>Answer:</u> "Inspection" may be somewhat of a misnomer when describing A-E contracts. In a sense, the submittals are "inspected" at review time.</p> <p>"Review", however is a more appropriate description as to what takes place when referring to submittals.</p> <p>The first step in the process of monitoring and inspection is the recognition of a design deficiency whether caused by design error or design omission. The contracting officer must rely heavily on advice from the technical personnel assigned to the project for detecting design deficiencies.</p>	
<div data-bbox="191 1161 272 1241" data-label="Image"> </div>	<p><u>Question:</u> What is a design deficiency?</p> <p><u>Answer:</u> A design deficiency may occur because of an error, an omission, or other inadequacy in the plans and specifications which would result in unsatisfactory workmanship or a structure deficiency.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 283 272 361" data-label="Image"> </div>	<p data-bbox="331 258 490 296"><u>Question:</u></p> <p data-bbox="331 300 1076 380">How do you go about discovering a design deficiency?</p> <p data-bbox="331 405 470 443"><u>Answer:</u></p> <p data-bbox="331 447 1076 514">Many design deficiencies go undiscovered during the design stage and even during construction.</p> <ol data-bbox="380 531 1076 808" style="list-style-type: none"> <li data-bbox="380 531 1076 667">1. The Government or the construction contractor may discover that the structure being built will not be usable if built according to the plans and specifications. <li data-bbox="380 703 1076 808">2. If the design deficiency is latent, the matter may not be discovered until after completion of the construction project. <p data-bbox="331 825 1076 997">Obviously, it is much less costly in terms of dollars, to discover errors or omissions during the design stage. This is why the contracting officer, the technical personnel, the Project Manager, and the reviewers attach so much importance to the review process.</p> <p data-bbox="331 1035 1076 1241"><u>Design</u> review, is made at the concept or first submittal stage, or after the design is sufficiently complete to enable substantive comment. The schedule of submittals is described in the scope of work. It will detail precisely:</p> <ul data-bbox="331 1266 1076 1627" style="list-style-type: none"> <li data-bbox="331 1266 1076 1528">• at what percentage of design completion are submittals to be presented. This varies among the different agencies from: <ul style="list-style-type: none"> <li data-bbox="428 1392 927 1423">- 12% up to 35% for the first submittal. <li data-bbox="428 1428 919 1459">- 50% to 80% on the second submittal, <li data-bbox="428 1463 959 1495">- 90% to 100% on the third submittal, and <li data-bbox="428 1499 922 1528">- date that final submittal is to be made. <li data-bbox="331 1549 1076 1627">• how many copies are to be submitted, and to whom they are to be directed. <p data-bbox="331 1675 1076 1837">The scope of A-E services should describe generally what is to be provided in each submittal, but the extent of detail is usually left up to the A-E.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
?	<p><u>Question:</u> What is generally included in the A-E's first submittal?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • Basic construction drawings and sketches. • Outline of specifications describing type and quality of construction. • Design analysis, offering alternate design solutions. • Construction cost estimate. 	
	<p><u>NOTE:</u> Because of the importance of discovering design errors and omissions at any stage during the design phase, the Interdisciplinary Coordination Review (ICR) is recognized as an important tool in discovering errors and omissions.</p>	
?	<p><u>Question:</u> What is meant by ICR?</p> <p><u>Answer:</u> ICR is a reliable method of performing quality assurance to detect errors, omissions and conflicts in the plans and specifications. In a set of plans and specifications, each section is drawn and written by different individuals representing various disciplines. ICR is designed to match up both drawings and specifications of the various disciplines by overlapping. It is accomplished during the 100% review.</p> <p>There are several techniques of using ICR, i.e.</p> <ul style="list-style-type: none"> • Constructibility reviews. • Redicheck method.(See Appendix A in the T/R.) • Use of CAD technology. 	
	<p>All reviews must be thorough, not merely surface examinations. All too often, insufficient effort is devoted to timely and adequate reviews. The temptation to compensate for design schedule slippages by reducing review time is false economy.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Time "saved" during design review is generally "lost" many times over during construction because problems that should have been solved prior to construction were not discovered until after construction has commenced. Upon final submittal by the A-E, documents must be thoroughly reviewed for Constructibility, Biddability and Operability.	
	<p><u>Question:</u> What is meant by "Constructibility"? "Biddability"?"</p> <p><u>Answer:</u> Show Viewgraph 5-1.</p>	

CONSTRUCTIBILITY

**Ease with which a Designed
Project can be Built.**


BIDDABILITY

**Ease with which the Contract
Documents can be Understood, Bid,
Administered, and Enforced.**

VG 5-1

Constructibility, Biddability and Operability reviews are types of ICR reviews which are normally not accomplished until after the A-E's final submission.




As in other reviews, the complexity and size of the project will determine the extent of participation required. Although the reviews are separate and apart from the other reviews during the submittal stage, documentation, processing, commentary, and procedures are the same.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Constructibility encompasses compatibility of design with:</p> <ul style="list-style-type: none"> • Site • Methods • Schedules • Site access • Materials • Techniques • Field condition • Construction time frame • Sufficiency of details and specifications free from errors, omissions and ambiguities. • Coordination between disciplines. • Availability of labor, materials & equipment. <p>Operability encompasses maintenance, life cycle and operation.</p>	
	<p><u>Question:</u></p> <p>When examining design documents for errors, omissions, and inconsistencies, there are many obvious questions which need to be answered such as the ones outlined in Viewgraph 5-2.</p>	

DESIGN REVIEW

- **Site Conditions and Restrictions**
 - **adaptations thereto**
- **Sequence of Work**
- **Allowance for Space & Access**
- **Clarity & Consistency of Specs**
- **Project Configuration/Design Features**
- **Economic Considerations**

VG 5-2

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p><u>Question:</u> What are some of the pitfalls that could be built into the contract submittal schedules over which you have no control.</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • Scheduling of unrealistic times for the A-E to perform the tasks required. • Scheduling of unrealistic times for the Government to review the plans and specs. • Not considering existing workload in arriving at turn around times. • Underestimating time required for review due to complexity. • Underestimating the time it takes the A-E to make changes following the reviews. • Failing to provide time for slippages which are bound to occur. <p>All of the above problems could be remedied more readily if they were anticipated at the time the project schedule was prepared. If ignored, you most certainly will encounter difficulties when it comes time to administer the construction contract.</p>	
	<p>Aside from the various discipline reviews that must take place, there are also several special reviews that may also take place. Viewgraph 5-3 provides an idea of the number of different experts involved in these <u>special reviews</u>. Ask the students to briefly describe each one.</p>	
	<p>Show Viewgraph 5-3.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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SPECIAL REVIEWS	
REVIEW	CONSISTS OF
<ul style="list-style-type: none"> • ARCHITECTURAL • INTERIOR DESIGN • ARCH. BARRIERS • UTILITIES • REAL ESTATE • ENVIRONMENTAL • FIRE PROTECTION • INDUSTRY HYGIENE 	<p>Visual or environmental effects.</p> <p>Walls, ceilings, floor construction</p> <p>Physically handicapped.</p> <p>Availability and types.</p> <p>Assurance that all rights, permits have been obtained.</p> <p>A-E provides all permits required by the design manual.</p> <p>Assures there no fire hazards, and all codes are met.</p> <p>Identify potential health hazards.</p>

VG 5-3

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="190 472 272 552" data-label="Image"> </div>	<p>An important aspect of administering an A-E contract is making monthly progress payments.</p>	
	<p><u>Question:</u> Payments under an A-E contract are based on what? Does the Prompt Payment Act apply?</p> <p><u>Answer:</u> Payments under an A-E contract are based on partial performance of the work. They are made on a <u>monthly basis</u>, and the amount paid is based on the monthly progress report submitted by the A-E.</p> <ul style="list-style-type: none"> • If the contract administrator agrees with the A-E, and progress is satisfactory, the full amount will be paid. • If this is not the case, and satisfactory progress is not being achieved, or quality is not satisfactory, the Government may withhold up to 10%. <p>The Prompt Payment Act does apply and states that an interest payment will be paid auto-matically if payment is not made by the 30th day after the designated billing office has received a PROPER invoice.</p> <p>A-E contracts have their own separate Prompt Payment clause at FAR 52.232-26 which reflects the progress payment nature of the contract.</p>	

TOPIC: 5.4 SELECT APPROPRIATE REMEDY


Ref: Text/Reference, Pages 5-30 through 5-35





Objective: Pursue remedies available to the Government in case of failure of the A-E to perform.

Time: 9:50 - 10:00
10:00- 10:30 Exercise 5.4

Method: Lecture, Discussion, Viewgraphs, Exercise

LESSON PLAN


REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the Class:</p> <p>The best remedy the Government has at its disposal is to prevent design errors and omissions from occurring in the first place. The nature of the design and construction industry is such that deficiencies can never be totally eliminated. However, because of the criticality of obtaining error free design plans and specifications for projects, the Government must strive to make improvements and to keep deficiencies at a minimum.</p> <p>Methods of prevention are based primarily on the various types of reviews which we have just discussed.</p> <p>The design professional is motivated in several ways to provide error free designs.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Question: What motivates the A-E to provide excellence?</p> <p>Answer:</p> <ol style="list-style-type: none"> ① The <u>Responsibility of the A-E Contractor</u> clause specifies that the A-E must provide a design that can be built within funding limitations, and any errors or deficiencies in the designs, drawings, specifications or other services furnished by the firm are corrected without cost to the Government. ② <u>Pride of authorship.</u> As a professional, the designer takes personal pride in his/her work. ③ <u>Future contract awards</u> will rely heavily on an evaluation of work already accomplished. 	
	<p>Question: However, if the A-E does not live up to its responsibilities, steps may be taken by the Government to determine what?</p> <p>Answer: A-E Liability.</p>	
	<p>Question: What kinds of facts would you, as a contracting officer, establish prior to pursuing A-E liability?</p>	
	<p>Show Viewgraph 5-4 for the answers that the class should identify.</p>	

PURSUING A-E LIABILITY

- STEP 1:** Establish that problem is a design error or omission.
- STEP 2:** Determine if it was the A-E's failure to meet professional standards *or* a breach of contract.
- STEP 3:** Determine if Government has suffered damages and what the dollar value is.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 289 272 373" data-label="Image"> </div>	<p><u>Question:</u> In pursuing A-E Liability, who bears the burden of proof?</p> <p><u>Answer:</u> In order for the Government to prevail in a claim against an A-E, it must be able to <u>prove that the A-E was negligent</u> and that the negligent error or omission was responsible for the damages.</p>	
<div data-bbox="191 674 272 758" data-label="Image"> </div>	<p><u>Question:</u> Does A-E liability extend coverage to latent defects?</p> <p><u>Answer:</u> Yes. However, it must be clear that the latent defect was caused by the designer, and the defect was not as a result of either an alteration made by the construction contractor and/or the Government, and that it is not the direct result of abuse by those occupying the facility.</p>	
	<p>The A-E may also file a claim against the Government. To believe that the A-E will not file a claim because</p> <ul style="list-style-type: none"> • of reluctance to enter into an adversarial position with the Government, • it is considered too small in dollar value to worry about, or • it would be too difficult to prove costs associated with a claim, <p>is not prudent.</p>	
	<p>Instructor will present the following brief case study as an example for purposes of encouraging discussion.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	CLASS EXERCISE 5.4 “THE WAREHOUSE CAPER”	
	<p>Instructions: Tell the students to turn to their Class Exercise Book, CE-5.4. They are to break into groups, read the case study, answer the questions, and be prepared to discuss the case.</p> <p>When ready, call upon each group to answer a question.</p> <p>Time: 15 minutes for Preparation 15 minutes for Presentation</p> <p>Method: Group Discussion</p>	

THE WAREHOUSE CAPER

The A-E was directed by the scope of the contract to demolish an existing warehouse and design a new warehouse on the same site. Furthermore, the A-E was directed in the scope of the contract work to make loading platforms 54 inches in height above the truck ramp.




The A-E elected to use the existing truck ramps for measurements; but in the process of designing the structure, the loading dock was only 36 inches above the height of the truck ramp, if constructed properly by the construction contractor. The dimensions on the plans were given for the height of the truck ramp and the height of the loading dock but nowhere on the plans did it show the height of the loading dock above the truck ramp.

The construction contractor completed the building. The Government inspected and accepted the work and a final release was provided by the construction contractor. The user of the warehouse installed various supply-handling equipment in the warehouse of the most modern type which took one year.

The first supplies arrived at the loading dock one year after the completion of the construction contract, and it was discovered that they could not be unloaded from the truck because of the height of the loading dock. The user of the warehouse was upset and advised the contracting officer in language that cannot be printed, that the facility was not usable as constructed.

The contracting officer investigated and found that the construction contractor constructed the warehouse precisely as set forth in the plans and specifications; however, during inspection the Government failed to notice the non conformance. He determined that the A-E failed in its responsibility to follow specific directions given by the Government to make the loading dock 54 inches above the truck ramp.

1. Since the discovery took place one year after construction, can the Government go back to the A-E for replacement costs under the Responsibility clause?
2. Did the Government give away its rights when it inspected and accepted the facility?
3. Is the Government to blame because of poor or sloppy inspection?
4. Would the A-E's failure be considered negligent? If so, would damages be collected.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p style="text-align: center;">INSTRUCTOR'S KEY</p> <p>Ask these follow-up questions after the group makes its response to a question.</p>	
	<p><u>Question #1:</u> The Government, in this case, inspected and accepted the facility. Isn't this considered final?</p> <p><u>Answer:</u> The Government's acceptance is conclusive except for latent defects, fraud, or such gross mistakes as amounting to fraud. If any of these conditions is proved to exist, <u>even after final payment is made</u>, the contractor is still responsible, and the Government's remedies are the same as if the items had been found to be defective before acceptance.</p>	
	<p><u>Question #2:</u> Ask one of the students to describe a latent defect.</p> <p><u>Answer:</u> A latent defect is a defect that existed at the time of the Government's acceptance, but could not be discovered by a reasonable inspection. The determination of whether a defect is "latent" thus may become a matter of what is a reasonable inspection. If a reasonable inspection was performed and the defect not discovered, the defect was latent. If a reasonable examination of an article would have revealed a defect, but the examination was not made, the defect is not latent.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 296 272 373" data-label="Image"></div>	<p><u>Question #3:</u> Ask the students if they believe (based on the facts given), that the Government's inspection in this case was reasonable?</p> <p><u>Answer:</u> Since all of the facts surrounding the inspection are not given, the answers will be subjective. A reasonable inspection is one that would normally be performed as a "custom of the trade."</p> <p>Where a design is defective in an "undiscoverable" manner, but the building was constructed properly in keeping with the design, the A-E must repair or replace the defective item or material free of charge.</p>	
<div data-bbox="191 951 272 1029" data-label="Image"></div>	<p><u>Question #4:</u> Does the class think it would be easy or difficult to prove negligence on the part of the A-E?</p> <p><u>Answer:</u> Negligence is generally difficult to prove. If the contractor had not taken any measurements whatsoever, and decided arbitrarily to specify a dimension, then the failure might be considered blatant. However, the case states that the A-E took existing measurements of the dock, indicating that it was probably an oversight.</p> <p>If the Government believes negligence was involved, it would have to present a strong case, and damages could be collected if the Government suffered from the deficiency.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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INSTRUCTOR'S KEY (cont.)

Once discussion has progressed to the extent that each group has been given an opportunity to comment, read the outcome to this actual case:

CASE OUTCOME

Action was taken by the contracting officer not only to have the A-E provide complete plans and specifications for correcting the deficiency, but also holding the A-E responsible for the additional cost to the Government. It was the A-E error which caused defective plans and specifications which were only discovered long after the construction contractor left the site.

The contracting officer was correct in pursuing A-E Liability, and in this case was successful in the pursuit and collection of damages. The inspection was considered prudent, and the fact that the measurements were not taken at the site during inspection was not considered unreasonable. It was a latent defect, and under the Responsibility clause, the A-E must assume responsibility.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 FAR 52.236- 22 T/R 4-12	<p><u>Question:</u> There is another important clause pertaining to remedies which is available to the Government for use in all A-E contracts. What is the clause?</p> <p><u>Answer:</u> “Design Within Funding Limitations” clause.</p> <p>The clause requires the A-E to accomplish the design in a manner that permits the Government to award a construction contract at a price that does not exceed the estimated construction contract price set forth in the contract.</p> <p>Failure to do so will require the A-E to redesign the facility and perform other services as required to permit a construction contract to be awarded within the funding limitation.</p>	
	<p>Construction Cost Limitations Comments</p> <p>The Design Within Funding Limitations clause was developed because an A-E owes the Government the duty of planning a project that can be built for a cost which is reasonably near the Government's limitation on construction costs. In determining whether the Government is relieved from payment of the services because the cost limitation is exceeded, you should consider the following:</p> <ul style="list-style-type: none"> • Was the cost limitation explicitly expressed at the time of negotiations? • Did the resultant excess costs result from orders by the Government to change the plans? • Has the Government waived the right to object, either by acceptance of performance without objection, or by failing to make a timely objection to that performance? • Did the A-E , after receiving the results of the "bid bust," suggest reasonable revision in plans without reducing scope which would, in turn, reduce the possible cost? 	

TOPIC: 5.5 ISSUE DELAY OR SUSPENSION

Ref: Text/Reference, Pages 5-36 through 5-37

Objective: Recognize how delays can occur and how to avoid constructive delay situations.

Time: 10:30 - 10:35

Method: Lecture, Discussion

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	5.5 Delays and Suspensions	
<div><div><div>?</div></div></div>	<p><u>Question:</u> The occurrence of delays and suspensions in an A-E contract may result from what?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none">• Delay by the Government in furnishing needed data required for design.• Non availability of the site when needed for information relating to design.• Delays in issuing Notice to Proceed.• Delays in supplying funds in an incrementally funded contract.• Delays in issuing change orders.• Constructive or ordered suspension.• Delays in approving VECPs.	
T/R p. 4-10	Although it occurs infrequently in A-E contracts, situations can arise during contract performance that will cause the Government to order a suspension of work under the provisions of the “Suspension of Work” clause.	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 300 272 380" data-label="Image"> </div>	<p><u>Question:</u> The A-E firm's ability to recover costs associated with a delay suspension depends on what?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • Establishing that the delay is the Government's fault. • Establishing that the delay is unreasonable. • Establishing that the A-E mitigated its costs associated with the delay. 	

TOPIC: 5.6 NEGOTIATE CONTRACT MODIFICATIONS



Ref: Text/Reference, Pages 5-37 through 5-47

Objective: Perform all of the contractual actions necessary in leading up to and including the issuance of a contract modification.

Time: 10:35 - 10:45
10:45 - 11:15 Class Exercise 5.6

Method: Lecture, Discussion, Viewgraphs, Exercise

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the class:</p> <p>Modifications to contract requirements are needed in A-E contracts as in any other contract. However, there are some slight differences in what generates the need for modifications.</p>	
	<p><u>Question:</u></p> <p>Ask the class to think about this for a minute. Then ask them to present some of the circumstances which may generate the need for a modification in an A-E contract.</p> <p><u>Answers:</u></p> <p>Possible answers should be similar to those listed in the Text/Reference, Exhibit 5-13 on Page 5-38. (Copy is provided for the instructor's convenience on the following page.)</p>	

SITUATIONS TRIGGERING DESIGN MODIFICATIONS

⇒ **Request from the client.**

Projects negotiated do not always include the client's "wish" list due to budget constraints, or failure to obtain all desired features in the original scope.

⇒ **Design changes due to change in the Government requirement, i.e., a way is found to accomplish the project objectives by a more economical means than the present project design incorporates.**

⇒ **Submittal comments.**

Design review comments are probably the second highest contributor of constructive changes in the A-E contract process. No two designers are likely to make identical choices when it comes to a particular design element. Because of this "designer's choice" aspect of A-E contracts, it is incumbent upon the Government to recognize these aspects and refrain from making design comments that change a designer's choice decision.

⇒ **An A-E inquiry.**

A question concerning the design criteria which needs clarification often results in discovery of a defect in the design.

⇒ **Technical directions issued by a Government employee leading to a constructive change order.**

⇒ **Design slippages.**

Design slippages can occur when the Government promises to have design review comments returned to the A-E within a specified period of time and doesn't.

⇒ **Value engineering.**

⇒ **Administrative changes.**

⇒ **Time extensions.**


⇒ **Government furnished property.**


⇒ **Options.**

Options are priced at the time of award, requiring a D&F for execution, and a unilateral contractor notification procedure. The unilateral notification procedure consists of both the notice of intent to exercise the option and the unilateral exercise of the option by contract modification. In A-E contracts the option must have been included in the synopsis.

⇒ **Suspension of Work.**



Exhibit 5-13

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>One of the tasks that must be accomplished before issuing a change order modification is an arithmetic check to see if the 6% statutory fee limitation has been complied with.</p>	
	<p style="text-align: center;">CLASS EXERCISE 5.6 “THE 6% SOLUTION”</p>	
	<p>Purpose: To provide hands-on experience in calculation of the 6% design fee.</p> <p>Instructions: Tell the students to turn to their Class Exercise Book, CE-5.6. They are to</p> <ul style="list-style-type: none"> • read the scenario and pages 5-40 to 5-42 in the T/R, • do the 6% calculations individually using copy of Exhibit 5-15 provided with the exercise, and • determine if the 6% limitation has been exceeded. <p>When ready, call upon each group spokesperson to give you her/his calculation of the 6% amount. When each group spokesperson has responded, ask if anyone else has a different answer. Write all responses on a blackboard or flipchart.</p> <p>Time: 15 minutes for Preparation 15 minutes for Presentation</p> <p>Method: Individual Calculations</p>	
	<p style="text-align: center;">6% SCENARIO</p> <p>An initial contract was awarded to an A-E firm in the total amount of \$120,000, with an Estimated Cost of Construction (ECC) of a new facility @ \$1,500,000. The contract called for various engineering services in the amount of \$40,000, and a design fee of \$80,000.</p> <p>The A-E had submitted, and the Government approved, the design up to 85% when the user submitted a change order request for some changes which resulted in the scrapping of \$5,000 worth of previous design work. The changes also resulted in an increase in the ECC of \$450,000, and an increase in the design fee of \$30,000.</p> <p>What is the design fee calculation?</p>	


REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	INSTRUCTOR'S KEY Completed Exhibit 5-15 follows; review with students and then ask 2 questions which follow. Be sure to point out that \$30K fee for \$450K change exceeds 6% but this is okay since total cost and fee is what matters.	

COMPUTATION OF DESIGN FEE PERCENTAGE			
A. For initial award:			
Design %	=	$\frac{\text{Design Fee}^*}{\text{Estimated Construction Cost}}$	times 100
B. For modifications:			
	<u>Estimated Construction Cost</u>	<u>Design Fee</u>	<u>Percent</u>
Basic contract plus previous changes	\$ <u>1,500,000</u> ①	\$ <u>80,000</u> ②	<u>5.3%</u> ③
This change	\$ <u>450,000</u>	\$ <u>30,000</u>	
Subtotal	\$ <u>1,950,000</u>	\$ <u>110,000</u>	<u>5.6%</u>
Less lost design effort		\$ <u>5,000</u> ④	
Less breakage		\$ <u>none</u> ④	
TOTAL	\$ <u>1,950,000</u>	\$ <u>105,000</u>	<u>5.4%</u> ⑤
① Total of estimated construction costs for basic contract and previous changes, made at the time of negotiation of the basic contract or change. Do not revise even though later revised estimates or even construction award costs are available.			
② Total of previously awarded design fees. Obtain from the contract file considering all changes to date.			
③ Cannot exceed six percent.			
④ Lost design effort or design breakage must be fully explained in the contract file. Do not use these lines if there are no lost design and no design breakage.			
⑤ Cannot exceed six percent.			
* Design fee is only those costs which go directly for the production of designs, drawings, plans and specifications, including construction cost estimate.			
<i>Exhibit 5-15</i>			

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 300 272 380" data-label="Image"> </div>	<p>Question: Our hypothetical situation did not cause the design fee 6% limitation to be exceeded. If it HAD been exceeded, what steps could be taken?</p> <p>Answer: If the design fee limitation would be exceeded by issuance of a change order, there are several options that you might consider.</p> <ol style="list-style-type: none"> 1. Review the original negotiation cost figures to see if errors may have been made by including elements in the design cost that should have been designated as associated costs. If errors are found that would sufficiently reduce the original design fee figure to the extent that the change order would be in compliance with the 6%, amend the figure by way of a memorandum, obtaining the concurrence and signature of the original approving official. 2. Don't issue a modification to change the contract. 3. Reduce the scope sufficiently to stay within the 6% by an agreement with the A-E. 	
<div data-bbox="191 1161 272 1241" data-label="Image"> </div>	<p>Question: Can the 6% restriction ever be exceeded? Give the following example:</p> <p><i>Example: Suppose that a contract is awarded and the design fee is exactly 6%. During the construction phase a change order is proposed which <u>will not require an adjustment to the ECC</u>, but will require added design drawings which cannot be attributed to any failure by the A-E in submitting the original design. The A-E submits an invoice for the added work which will result in the 6% being exceeded.</i></p> <p>In this case, can the 6% be exceeded?</p> <p>Answer: No. The 6% is statutory law, and it cannot be exceeded.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p align="center">DISPUTES AND CONTROVERSIES</p> <p>Disputes and controversies arise in A-E contracts much the same as in any other contract. The constraints of cost, time, and the environment leave little room for the creation of perfect specifications and contract documents.</p> <p>The A-E is committed to design a project within the constraints of cost and time, and as such, if events cause a change to the cost, and or time, remedies are sought through claims and change orders. Changes in cost or time must be instituted by a formal contract modification.</p>	
	<p><u>Question:</u> What sort of circumstances in the A-E environment might lead to a dispute?</p> <p><u>Possible Answers:</u></p> <ul style="list-style-type: none"> • Changed work. • Unreasonable delay. • Termination. • Suspension. • Constructive change. 	
	<p><u>Question:</u> All disputes or disagreements do not lead to claims. When does a claim become a claim?</p> <p><u>Answer:</u> A claim is not a claim without the existence of a dispute which must proceed the filing of a claim:</p> <ol style="list-style-type: none"> 1. A-E states in writing the facts of its case and its position, requesting a final decision. 2. After receipt by the contracting officer, a thorough review and fact finding takes place. 3. Contracting officer makes a final decision. 4. This final decision becomes the very foundation of the dispute and appeal process. <p>In the interim, the A-E must continue to perform.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Typically, an A-E may be hesitant to file a claim for ANY reason because of the perceived notion that a conflict resulting in the dispute procedure being employed may result in failure to receive future awards under the Brooks Act.</p> <p>Therefore, in most cases the A-E prefers to "work out" differences through negotiation, and/or if necessary, "eat" some of the losses.</p>	
	<p>Under such economic conditions as experienced in the early 90s, the A-E's posture on filing claims may very well change:</p> <ul style="list-style-type: none"> • Fewer contract awards due to a decrease in requirements being generated, • Enduring profit squeeze in the dollar crunch, • Environmental contracts being issued, all of which contain many uncertainties due to their very nature <p>The A-E may increasingly seek legal remedies available under the contract as a matter of survival.</p>	
	<p>The burden of proving associated costs attributed to a claim rests with the A-E. [The A-E may, in fact, have a difficult time proving costs associated with any given delay situation, but it is not impossible.]</p> <p>While such incurred costs would be considerably less than that of a construction delay situation, the costs are, however, more easily identifiable because there are fewer elements attached to running an A-E firm compared to that of a construction company.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	Basic procedures for claim and change order administration are illustrated in Viewgraph 5-5.	

CLAIMS & CHANGE ORDERS

STEP 1: Identify claim or change order.

STEP 2: Analyze delay time and cost.

STEP 3: Prepare and assemble systematic and accurate documentation.

STEP 4: Perform costs analysis and conduct negotiations.

VG 5-5



Stress the importance of file documentation to the students concerning the outcome of a dispute or claim.

It is vital that all forms of communication, whether written or oral, scheduled or unscheduled, be thoroughly documented in the project files. At a minimum, it provides

- demonstration that decision based on right type of information.
- clarification for any future misunderstandings or conflicts,
- continuity as personnel changes occur, and
- a record for use in future projects.



Show Viewgraph 5-6.

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
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ADMINISTRATIVE RECORD

- **Confirm Phone Calls by Written Memo.**
- **Log All inquiries and Phone Calls.**
- **Periodically Review the Records.**
- **Correct or Rebut any Discrepancies in Writing.**
- **Stay on Top of the Project.**

VG 5-6

TOPIC: 5.7 CONTRACT CLOSEOUT/PERFORMANCE EVALUATIONS


Ref: Text/Reference, Pages 5-46 through 5-55




Objective: All actions are complete, including claims, A-E performance evaluation has been accomplished, and documents are accounted for.

Time: 11:15 - 11:35
 11:35 - 12:00 Class Exercise 5.7
 12:00 - 1:00 LUNCH
 1:00 - 3:00 E X A M

Method: Lecture, Discussion, Exercise

LESSON PLAN

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Tell the class: There are several important things to remember in A-E contract file closeout. Go over the following with the class:</p> <ul style="list-style-type: none"> An A-E contract must not be closed out until the A-E's performance has been reviewed, and the contracting officer has taken action on any disclosed deficiencies. If action has been taken to recover damages, the matter must be fully resolved prior to contract closeout. Resolution of A-E liability issues is necessary prior to contract closeout. <p>The <u>most important last step in the contract is the performance evaluation</u>. Some agencies make two evaluations:</p> <ol style="list-style-type: none"> At the conclusion of the A-E design, and At the time the construction project is completed. <p>The A-E attaches a great deal of importance to the rating he receives. He/she knows very well that a poor rating will probably sound the death knell to any future contract awards.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
 TR 5-48 	<p>The performance evaluations are prepared on <u>SF 1421, Performance Evaluation (A-E)</u>. Refer students to pages 5-48 through 5-51. Briefly review the form with them (pointing out blocks you consider important) as a set up for Class Exercise 5.7.</p> <p style="text-align: center;">CLASS EXERCISE 5.7 “THE REPORT CARD”</p> <p>Instructions: Tell the students to turn to their Class Exercise Book, CE-5.7. They are to read the completed SF 1421, discuss the data provided on the form with their group, and then complete blocks 13 and 14.</p> <p>When ready, call upon one group spokesperson to give you her/his group’s evaluation & recommendation and its rationale. Then ask if anyone else has a different answer, and let the group spokesperson explain.</p> <p>Time: 15 minutes for Preparation 10 minutes for Presentation</p> <p>Method: Group Consensus</p>	
	<p style="text-align: center;">INSTRUCTOR'S KEY</p> <p>There is no “correct” answer. The SF 1421 is a mixture of average and poor evaluations designed to illicit some poor and some average overall ratings, and some yes and some no answers to future contracts.</p> <p>Ask the class for any experiences they have had with SF1421s and relate any of your own.</p>	


PERFORMANCE EVALUATION (ARCHITECT-ENGINEER)				1. PROJECT NUMBER <i>P-165</i>	
				2. CONTRACT NUMBER <i>GR9-C-9x-0013</i>	
IMPORTANT: Be sure to complete Performance section on reverse. If additional space is necessary for any item, use Remarks section on reverse.					
3. TYPE OF REPORT (<i>Check one</i>) <input type="checkbox"/> INTERIM <input type="checkbox"/> COMPLETION OF DESIGN OR STUDY <input checked="" type="checkbox"/> COMPLETION OF CONSTRUCTION <input type="checkbox"/> TERMINATION			4. REPORT NUMBER <i>C-9x-0013</i>		5. DATE OF REPORT <i>March 7, 199x</i>
6. NAME AND ADDRESS OF CONTRACTOR <i>G. David Miller 6784 N. Harbor Los Angeles, CA</i>			7. PROJECT DESCRIPTION AND LOCATION <i>Cafeteria for Federal Building</i>		
8. OFFICE RESPONSIBLE FOR					
A. SELECTION OF CONTRACTOR <i>Design Division</i>		B. NEGOTIATION/AWARD OF CONTRACT <i>Contracts Division</i>		C. ADMINISTRATION OF CONTRACT <i>Region 9</i>	
9. CONTRACT DATA					
A. TYPE OF WORK <i>Design</i>			B. TYPE OF CONTRACT <input checked="" type="checkbox"/> FIXED-PRICE <input type="checkbox"/> OTHER (<i>Specify</i>) <input type="checkbox"/> COST-REIMBURSEMENT		
C. PROJECT COMPLEXITY <input type="checkbox"/> DIFFICULT <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> SIMPLE		D. PROFESSIONAL SERVICES CONTRACT			
		INITIAL FEE <i>\$ 450,000</i>		TOTAL FEE <i>\$ 490,000</i>	
		AMENDMENTS NO. <i>2</i> AMOUNT <i>\$ 40,000</i>		CLAIMS BY CONTRACTOR NO. <i>N/A</i> AMOUNT <i>\$ N/A</i>	
E. DATE CONTRACT AWARDED <i>April 1, 199x</i>		F. CONTRACT COMPLETION DATE (<i>including extensions</i>) <i>May 20, 199x</i>		G. ACTUAL COMPLETION DATE OF CONTRACT <i>June 6, 199x</i>	
10. KEY CONSULTANT DATA					
A. NAMES <i>Mary Sampson Ed Martinez</i>		B. ADDRESS <i>Los Angeles, CA Burbank, CA</i>		C. SPECIALTY <i>Mech./ Elect. Interior Designer</i>	
11. CONSTRUCTION COSTS		A. INITIAL ESTIMATE <i>\$ 1,150,000</i>		B. AWARD <i>\$ 1,200,000</i>	
				C. ACTUAL <i>\$ 1,240,000</i>	
12. CONSTRUCTION CHANGES AND DEFICIENCIES		NUMBER		TOTAL	
A. CONSTRUCTION CHANGES		<i>2</i>		<i>\$ 40,000</i>	
B. CONSTRUCTION CHANGES RESULTING FROM DEFICIENCIES IN A-E PERFORMANCE		<i>None</i>		<i>\$</i>	
C. DEFICIENCIES PAID FOR BY A-E		<i>None</i>		<i>\$</i>	
D. DEFICIENCIES PAID FOR BY GOVERNMENT		<i>None</i>		<i>\$</i>	
13. OVERALL RATING <input type="checkbox"/> EXCELLENT <input type="checkbox"/> AVERAGE <input type="checkbox"/> POOR			14. RECOMMENDED FOR FUTURE CONTRACTS? <input type="checkbox"/> YES <input type="checkbox"/> NO (<i>If "NO," explain in REMARKS on reverse</i>)		
15A. NAME AND TITLE OF RATING OFFICIAL <i>John Smith, CE</i>			15A. NAME AND TITLE OF REVIEWING OFFICIAL <i>Helen Adams Construction Dept.</i>		
15B. SIGNATURE		15C. DATE		15C. DATE	

PERFORMANCE																
STAGES OF SERVICES (As applicable)					RATING FACTORS/RATINGS									RATED BY		
					NOT APPLICABLE	ACCURACY	COMPLETENESS	COOPERATION	COORDINATION	MANAGEMENT	MEETING SCHEDULE	PERSONNEL	ABILITY	WORK QUALITY	CODE LEGEND:	
															+	EXCELLENT
														A	AVERAGE	
														P	POOR	
														N/A	NOT APPLICABLE	
														NI	NO INFORMATION	
														SIGNATURE AND DATE		
CONCEPTS	SCHEDULE (Mo., day, yr.)	FROM	TO	ARCH.												
				STRU.												
	ACTUAL (Mo., day, yr.)	FROM	TO	MECH.												
				ELEC.												
TENTATIVES	SCHEDULE (Mo., day, yr.)	FROM	TO	ARCH.		P	P	P	P	P	P	A	P	Amy Kim		
				STRU.		P	P	P	P	P	P	A	P	Amy Kim		
	ACTUAL (Mo., day, yr.)	FROM	TO	MECH.												
				ELEC.												
WORKING DRAWINGS	SCHEDULE (Mo., day, yr.)	FROM	TO	ARCH.		P	P	P	P	A	A	A	A	Amy Kim		
				STRU.		P	P	P	P	A	A	A	A	Amy Kim		
	ACTUAL (Mo., day, yr.)	FROM	TO	MECH.		P	P	P	A	A	A	A	A	Amy Kim		
				ELEC.		P	P	P	A	A	P	A	A	Amy Kim		
ESTIMATES				A/S		P	P	P	P	P	P	A	P	Amy Kim		
				M/E		P	P	P	P	P	P	A	P	Amy Kim		
CRITICAL PATH METHOD				PRE-AWARD												
				POST-AWARD												
POST CONSTRUCTION CONTRACT SERVICES				SHOP DWGS		A	A	A	A	A	A	A	A	Helen Adams		
				MANUALS												
INSPECTION				FIELD		A	A	A	A	A	A	A	A	Helen Adams		
				OFFICE												
SOLICITATION DOCUMENTS																
REMARKS <p><i>This is firm's second Government contract, and they have shown only slight improvement (shop drawings are better). Cost estimates on the change orders were not realistic (although the required changes were not the fault of the A-E). Contractor's personnel do seem to have the ability to perform.</i></p>																

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>The Government exercises a great deal of care and detail in assigning a rating that will be fair and unbiased. Careful consideration is given to each of the factors listed on the form and a rating is established on each element.</p> <p>Then the total of the rated factors forms the basis for the rating. <u>Evaluators and "approvers" must be individuals who have knowledge of the A-E firm's performance.</u></p>	
<div>?</div> FAR 36.604	<p><u>Question:</u> When, or at what dollar value, is a performance evaluation required?</p> <p><u>Answer:</u> For each contract of \$25,000 or more, a performance evaluation shall be prepared. However, some agencies require one on every contract, regardless of dollar value.</p> <p><u>Interim reports</u> are also encouraged, especially if the A-E is performing at a level which, without corrective action, may result in an unsatisfactory on any one rating factor.</p>	
<div>?</div>	<p><u>Question:</u> How does a reviewer go about judging quality? What constitutes quality in an A-E contract?</p> <p><u>Answer:</u> Quality of A-E design can be judged by the</p> <ul style="list-style-type: none"> • accuracy demonstrated in the submittals, • timeliness of submittals, • attention to detail, • few questions or clarifications generated during the review process, as well as • appearance of the design itself. 	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>There are two elements which must be met in pursuit of outstanding performance ratings for an A-E in judging quality.</p> <p>① <u>Quality in Perception:</u> The customer, i.e., the client, has certain needs and expectations. If the completed design received meets those perceived needs, it can be said that the design has quality in perception. In other words, the client is pleased.</p> <p>② <u>Quality in Fact:</u> The contract has established explicit contract requirements concerning the quality of the design contracted for. If the design meets those requirements, then the performance evaluator can state that the design meets the requirements of quality in fact.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
<div data-bbox="191 300 272 380" data-label="Image"> </div>	<p><u>Question:</u> What if an A-E receives an outstanding rating on the completed design contract, but receives a below normal rating or an unsatisfactory rating on the construction phase? Is this possible?</p> <p><u>Answer:</u> Yes, it is possible that from all appearances, the A-E's work was judged to be outstanding in quality, timeliness, and management during design, but actually contained hidden errors or omissions that were not evident until construction brought flaws to light.</p> <p>This is why it is often advisable to hold in suspension a design rating until such time as the construction is completed.</p>	
<div data-bbox="191 1014 272 1094" data-label="Image"> </div>	<p><u>Question:</u> What are the procedures in assigning an unsatisfactory rating?</p> <p><u>Answer:</u></p> <ul style="list-style-type: none"> • Notify A-E in writing. • Give a copy of the proposed rating to A-E. • Invite A-E to discuss the evaluation. • Leave evaluation unsigned until after the meeting. • Review and respond to A-E's rebuttal before assigning the rating. • Attach A-E's rebuttal to the evaluation. <p>Distribution of performance evaluations must be in accordance with agency procedures.</p>	

REF.	STEPS IN PRESENTING THE TOPIC	INSTRUCTOR NOTES
	<p>Note to Instructor:</p> <p>As a review and for student reinforcement of the overall objectives, go over the answers to the scenario questions that are provided at the conclusion of the Text/Reference Chapter 5. The questions and answers to the scenario are provided on the next page.</p>	

1. What is required in administering an A-E contract?

All duties associated with performance.

- Post award conference.
- Knowledge of the peculiar A-E clauses.
- Negotiation and issuance of all modifications.
- Track submittals.
- Resolve all disputes.
- Issue Contracting Officer's Final Decisions.
- Process A-E Performance Evaluations.

2. How does administering an A-E contract differ from a supply or construction contract?

Differences are many, but some of them are considered significant.

In construction the administration requires inspecting and accepting as progress is made on a daily basis. There are multiple tasks to monitor which are peculiar to the construction phase, i.e. Payrolls, Davis Bacon Wage Rates, Buy American - Construction Materials, quality of materials and workmanship, as well as progress. There are special clauses that apply only to construction contracts.

Only one performance evaluation which is issued at the conclusion of the construction is required, although interim evaluations are sometimes issued.

In the administration of an A/E contract, the Government is interested primarily in quality and timeliness of the submittals required. The submittal schedule is set forth in the contract and progress is monitored by means of discussions with the designer, as well as periodic visits that may be conducted at the A-E's place of business. The submittals consist of copies of the specifications and drawings as progress is made, beginning with the A-E's concept and ending with the final plans and specs. There are special clauses used only for A-E contracts, as well as other clauses in which an alternate wording is inserted in order to tailor it to the A-E environment. In A-E contracting two performance evaluations are required, one at the end of the design contract, and the other at the conclusion of the construction phase.

3. *How is progress measured?*

By the timeliness and quality of submittals.

4. *Is a conference held much the same as in a construction contract?*

Yes, it is just as important to hold a predesign conference as to hold a preconstruction conference, and for the same reasons.

5. *How are progress payments made?*

Progress payments are made in the same manner and under the same requirements as construction progress payments are made. They are based on progress. The Prompt Payment Act also applies.

6. *What about delays, suspension of work, mods and terminations?*

Delays in an A-E contract are normally connected with the submittal process, whereas in a construction they may occur anytime and anyplace throughout the construction phase. Work suspension rarely occurs in an A-E contract, but when it does the process is the same as in construction. Modifications are processed in the same manner, only the reasons are sometimes different. Terminations are covered in one clause in lieu of two, i.e. Termination for Convenience and Termination for Default.

7. *How do you assure quality in an A-E contract?*

Quality is an important element in the selection of an A-E. Without quality in design, the Government will end up with less than a quality end product - the building. The difference, however, is that the Brooks Act permits the Government to initially select a contractor based on an assessment of the firm's professional reputation, rather than price. This makes A-E contracting unique.

